UNITED
NATIONS

TD

United Nations Conference
on Trade and Development

GENERAL

TD/B/WG.1/6
28 April 1993

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Ad Hoc Working Group on Investment and
Financial Flows; Non-debt-creating
Finance for Development; New
Mechanisms for Increasing Investment
and Financial Flows
Second session
Geneva, 28 June 1993
Item 3 of the provisional agenda

CONSIDERATION OF HOST AND HOME COUNTRIES POLICIES AND MEASURES TO PROMOTE FOREIGN DIRECT INVESTMENT, INCLUDING EXPORT PROCESSING ZONES AND SPECIAL ECONOMIC ZONES

Export processing zones: Role of foreign direct investment and developmental impact

Report by the UNCTAD secretariat

GE.93-51722 (E)

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Summary and Conclusions

(i) The rapid expansion of export processing zones (EPZs) in developing countries during the last two decades represents a significant development in the world economy. While the EPZ concept has been a subject of controversy, the proliferation of EPZs would seem to indicate that they have met some of the expectations of host countries. One of the principal objectives for the establishment of an EPZ is to attract foreign direct investment (FDI). There is undeniable evidence that the EPZ sector, although still small, has been among the most dynamic sectors in attracting FDI, especially in recent years. Foreign investors account for a major portion of investment and employment in EPZs. Perhaps by virtue of their size, they seem to play a decisive role in shaping the industrial structure of EPZs, which is characterized by the dominance of either the textiles and garments industry or the electronics industry. Foreign investors also seem to have an influence in orienting the pattern of evolution of EPZs.

(ii) EPZs have been successful in promoting exports of manufactures and in generating foreign exchange earnings. They have also contributed considerably to the creation of productive employment, although this has involved mainly cheap low-skilled labour. The large-scale employment of young women is a dominant feature and perhaps the foremost social contribution of EPZs. They have given new opportunities and values to women who had not previously had jobs and who probably would not have entered the salaried work force in the absence of EPZs.

(iii) EPZs' effectiveness as an instrument for the achievement of long-term development objectives largely depends on the degree of linkages created with the domestic economy and on the extent to which they provide an avenue for the transfer of technology and the upgrading of skills. In this regard, EPZs seem to have fallen short of expectations. There is an inherent bias in the EPZ set-up which hinders the creation of linkages. Import-intensive operations are encouraged by special concessions on imports, although the principal obstacle to domestic sourcing seems to be the inability of local suppliers to deliver high-quality goods and services at internationally competitive prices. The export orientation of EPZs and strict regulation of domestic sales inhibits the development of forward linkages. A major limiting factor to the transfer of technology and skills is the nature of the production processes typically undertaken in EPZs, which involve low technology and/or simple skills.

(iv) Technology and skill transfers are, however, not negligible although they take place essentially within the zone, especially in joint ventures between transnational corporations (TNCs) and local firms. Moreover, progressive automation and more sophisticated processes as well as a growing number of local managers and technicians are already observable in some EPZs. Demonstration effects, which could have a modernizing influence on the economy, could well represent one of the most important contributions of EPZs to the host country.

(v) It is hard to determine the extent to which national policy has shaped the pattern of evolution of EPZs. What is evident, however, is that EPZs have evolved in a manner which tends to promote greater integration with the local

economy and a wider diversity of activities. This is reflected in the geographical extension of EPZ conditions, the more liberal attitude towards import processing, the growing participation of domestic enterprises, and the extension of activities to services and other sectors. This evolution is manifested in the different structures of existing EPZs, which imply a wider range of options for countries planning to establish EPZs as a means of promoting export-oriented industrialization. It must be stressed that EPZs represent only one possible policy instrument whose merits and disadvantages have to be weighed against those of other schemes for achieving the same goal.

(vi) Experience with EPZs has varied considerably among countries. There have been remarkably successful EPZs and among the key elements of this success are: a favourable investment climate; the presence of a high-quality labour force and an active local business community; and government's unflagging support for the EPZs. There have also been notable failures, some of which could be attributed to poor location, inadequate infrastructure, insufficient promotion, excessive costs and mismanagement.

(vii) Results of cost-benefit analyses of a few Asian EPZs have shown that incentives, subsidies and infrastructure expenditures entail considerable costs for the host countries. These costs are sometimes difficult to justify, from both the financial and economic viewpoints. However, stiff competition among EPZs of developing countries to attract investors has exerted pressure to offer increasingly generous incentives, thus eroding their net benefits. The harmonization of incentives is, therefore, an issue that deserves attention.

(viii) The long-run growth and development of EPZs will depend on whether they are well equipped to meet the challenges emerging from the structural changes in both the domestic and the international economy, including the changing patterns and more exigent requirements of FDI. The current worldwide industrial restructuring demands additional locational assets, such as a highly skilled labour force and the availability of a comprehensive support network and crucial industrial services. Host countries, therefore, need to upgrade not only the skills and educational levels of the labour force but also the technological infrastructure of the EPZ. The long-term viability of EPZs also requires their operations to be properly integrated in the overall economic and industrial development strategy of the country.

I. The background

A. EPZs and the industrialization strategy

1. The emergence of EPZs reflects a shift in the industrialization strategy of developing countries, which in the 1950s and 1960s favoured import substitution policies to reduce dependence on the outside world. These inward-looking policies were supported with high tariff barriers, generous subsidies and foreign exchange restrictions. While new industries were created and employment generated, it soon became apparent that there were limits to what they could achieve. The problem was particularly serious for small countries where domestic market size set a limit to growth. Moreover, while imports of manufactured consumer goods were reduced, there was a greater demand for imports of intermediate and capital goods to support the

industrialization process, thus creating balance-of-payments pressures. Tariff protection also often led to industrial inefficiency and high cost products that were not internationally competitive and therefore provided little contribution to foreign exchange earnings.

2. Since the late 1960s, there has been a gradual shift in emphasis towards an outward-looking industrialization strategy through the promotion of non-traditional exports. This was accompanied by a more liberal attitude towards FDI in an effort to attract it not only to acquire much needed capital but also to promote the transfer of new technologies, upgrade skills and acquire access to markets and distribution channels. EPZs were a means of fostering export-oriented industrialization, and in some countries, they assumed a prominent role in the strategy. The convergence between this shift in orientation in developing countries and the process of industrial relocation carried out by TNCs in industrialized countries to minimize production costs favoured the rapid growth of EPZs. The fragmentation of complex production processes enabled labour-intensive operations to be transferred to low-cost areas. This was supported by the developments in transport and telecommunication which made geographical barriers less important in industrial location and production control. 1/

B. Definition and objectives

3. The definition of an EPZ which conforms most closely to the original concept is that of a well-defined geographical area, enjoying customs privileges and other incentives, in which the primary activity is processing of goods for export. It is a modern adaptation of a free port or free trade zone (FTZ) where the principal activity is warehousing or trading. The enclave feature of EPZs served a number of purposes. It facilitated an internal adjustment process where reforms could be introduced gradually before their application to the rest of the country. For countries which continued to favour import substitution policies but wanted to diversify, this physical segregation avoided offending established interests. If desired, the influence of foreign-dominated enterprises on the society could be confined or exceptional conditions for some activities could be set up. For resource-poor countries, concentrating resources in the form of sophisticated infrastructure in a defined area offered obvious cost advantages.

4. The general objective of EPZs is to promote export-oriented industrialization. Among the common specific objectives are: to attract foreign capital; to provide new employment opportunities; to enhance foreign exchange earnings; to promote the transfer of technology and upgrade skills; and to develop linkages with the domestic economy. The importance attached to each of these objectives varies from country to country. Some zones were also meant to promote regional development 2/ or to exploit local natural resources. 3/ India's Santa Cruz EPZ was specifically created to acquire technological know-how in the electronics industry.

5. EPZs as they now exist have acquired a wide variety of structures, with some diverging considerably from the traditional concept. The EPZ regime that exists in Tunisia and Mauritius allows EPZ conditions country-wide to industrial estates or firms that produce for export. The Special Economic

Zones in China not only have a much larger geographical coverage but activities therein are not limited to manufacturing. Furthermore, there are economies such as Hong Kong and Singapore which do not impose tariffs or import restrictions and could therefore be considered export processing countries/territories. There is also the Manaus Free Zone in Brazil where products are sold almost exclusively to the domestic market, and therefore would be more appropriately described as an import processing zone. 4/

C. Historical perspective and global dimension

6. Ireland is credited with having pioneered the implementation of the modern EPZ concept with the establishment of the Shannon Export Free Zone in 1959. 5/ The visibility and success of the Shannon experiment, reinforced by technical assistance and studies by UNIDO and other international organizations, were among the important factors responsible for the rapid diffusion of EPZs in developing countries. The first developing country to set up an EPZ was India with the creation of the Kandla Free Trade Zone in 1965. In 1970, there were about eight EPZs in developing countries. By 1980, the number had risen to around 55 in some 30 developing countries. 6/ There are now over 200 EPZs in 60 developing countries and more are under construction or at the planning stage. Roughly half of the total number of EPZs is located in Asia, about 80 are in Latin America and the Caribbean, and more than 20 in Africa (see table 1).

7. EPZ employment increased rapidly from around 50,000 in 1970 7/ to over 2.4 million in 1990. Excluding employment in China, Latin America and the Caribbean accounted for over 50 per cent of the total, Asia and the Pacific for 41 per cent and Africa for less than 9 per cent. EPZ employment is heavily concentrated, with 12 countries and territories accounting for almost 84 per cent of the total. 8/ The same high concentration rates are found at the regional level. Three host countries accounted for almost 97 per cent of total EPZ employment in Africa (Mauritius, Tunisia and Egypt) and 84 per cent in Latin America and the Caribbean (Mexico, Dominican Republic and Brazil). In comparison, the concentration rate in Asia is much lower, with the three leading economies (Singapore, Hong Kong and Malaysia) representing 54 per cent of regional employment.

II. The role of foreign direct investment in EPZs

A. Attracting investors

8. EPZs were particularly designed to serve as focal points in attracting FDI needed to bolster the industrialization efforts of developing countries. EPZs provide an elaborate package of incentives which remove or reduce physical and administrative obstacles to relocation of manufacturing activities from foreign countries. This package also normally includes fiscal and financial concessions to foreign companies operating in the zones.

9. EPZs equipped with a fairly sophisticated infrastructure as well as standard factory buildings considerably reduce the volume of initial investment for investors. Moreover, operations can start right away and hence an earlier return on tied-up capital can be expected. A wide range of

Table 1

Employment in export processing zones in developing countries/territories, 1990

Region/Country/ Territory	No. of EPZs	Employment (thousand)	Location/Name
AFRICA	22	168.3	
Botswana	1	..	..
Egypt	5	25.0	Cairo/Alexandria/Suez/Port Said/Ismailia
Ghana	1	2.6	Tema
Lesotho	1	..	..
Liberia	1	..	..
Mauritius	.	90.0	..
Morocco	1	1.5	Tanger
Senegal	1	1.2	Dakar
Swaziland	1	..	..
Togo	1	..	Lomé
Tunisia	9	48.0	Industrial areas
ASIA AND THE PACIFIC	94	1 282.3	
Bahrein	2	4.6	Mina/North Sitra
Bangladesh	1	7.0	Chittagong
China a/	7	490.0	Shenzhen/Dongguan/Zhuhai/ Pudong/Shantou/Xiamen/ Hai nan Island
Fiji	1	..	..
Hong Kong	14	120.0	Industrial areas
India	6	30.0	Santa Cruz/Kandla/Falta/ Madras/Cochin/Noida
Indonesia b/	2	50.0	Batam Island/Jakarta
Jordan	1	..	..
Korea, Rep. of	2	24.7	Masan/Iri
Macau	4	60.0	Ribeira do Patane/Avenida do Almirante Lacerda/Avenida do Coronel Mesquita/Areia Preta Bazan
Malaysia	10	98.9	Lepas/Prai Wharves/Prai/Pulau Jerejak/Sungei Way/Batu Berendam/Tanjong Kling/Ulu Klang/Telok Panglima/Senai
Pakistan	1	2.0	Karachi
Philippines	4	35.4	Bataan/Baguio/Mactan/Cavite
Singapore	22	210.0	Industrial areas
Sri Lanka	2	55.0	Katunayake/Biyagama
Syrian Arab Rep.	6	..	Damascus/Adra/Damascus International Airport/ Aleppo/Lattaakia/Tortous Port
Taiwan, Province of China			
Thailand	3	70.7	Kaohsiung/Nantze/Taichung
Tonga	1	12.0	Lat Krabang
Turkey	1	..	..
United Arab Emirates	2	..	Mersin/Antalya
Yemen	1	12.0	Jebel Ali
	1	..	..

Employment in export processing zones in developing countries/territories, 1990 (cont'd)

Region/Country/ Territory	No. of EPZs	Employment (thousand)	Location/Name
LATIN AMERICA AND THE CARIBBEAN	79	988.0	
Antigua & Barbuda	1	..	..
Argentina	1	..	..
Aruba	2	0.8	Barcadera/Oranjestadt Port
Bahamas	2	8.0	Freeport Grand Bahama
Barbados	.	20.0	..
Belize	1	0.6	..
Brazil	1	75.0	Manaus
Chile	1	8.5	Iquique
Colombia	8	7.0	Barranquilla/Buenaventura/Cucuta Cartagena/Santa Marta/ Rionegro/Palmaseca en Palmira/Uraba
Costa Rica	4	6.0	Cartago/Coto Sur/ Alajuela/Metropolitana
Dominica	1	..	..
Dominican Republic	18	150.0	Bani/Barahona/Bonao/ Esperanza/Hainamoza/ Itabo/La Romana/ La Vega/Las Americas/ Moca/San Pedro de Macoris/Puerto Plata/San Isidro/New San Pedro de Macoris/Santiago/Villa Altagracia/ Villa Mella
El Salvador	1	3.5	San Bartolo
Grenada	1	..	..
Guatemala	1	40.0	Santo Tomas de Castilla
Haiti	1	43.0	Port-au-Prince
Honduras	2	3.0	Choloma/La Ceiba
Jaimica	2	18.0	Kingston/Montego Bay
Mexico	23	600.0	Industry parks (Maquiladoras)
Montserrat	.	..	..
Netherlands Antilles	1	0.3	Curacao
Nicaragua	1	..	Apex La Mercedes
Panama	1	0.2	Colon
St. Kitts & St. Lucia	1	..	..
St. Lucia	2	1.5	Grande Cul-de-Sac Bay/Vieux Fort
St. Vincent	1	0.4	..
Trinidad & Tobago	1	0.4	Point Lisas
Total	195	2 438.6	

Source: Starnberg Institute

Note: EPZ conditions are available countrywide in Mauritius, Tunisia, Hong Kong, Macau and Singapore and the number of EPZs refers to major industrial areas. The total number of EPZs does not include any from Mauritius but an earlier publication indicates the existence of seven major industrial parks in 1986.

a/ Employment figure is for Shenzhen and Dongguan only.

b/ Employment figure is for Batam Island only.

infrastructure facilities is provided, which would normally include access to seaport or airport, transport and telecommunication networks, energy and water supply.

10. A major complaint of foreign firms attempting to establish operations in developing countries concerns the bureaucratic hurdles involved. Thus, the streamlined administrative procedures in EPZs are a major attraction for them. Zones also offer support services essential to investors' activities. These include advisory support on labour recruitment and other personnel matters; commercial services such as banking, insurance, packaging, shipping and forwarding; legal and accounting services; social services such as canteen and medical facilities; and specialized engineering repairs.

11. Customs privileges are, of course, a principal feature of EPZs. These imply exemption from import duties on machinery and production inputs, freedom from quantitative import restrictions, as well as duty-free exports of products processed in the zone. Additional fiscal and financial incentives are offered, which may take the form of tax holidays, subsidies on public utilities and rents and exemption from foreign exchange control. Another inducement which seems to carry a greater weight than tax holidays is the provision of credit, sometimes with preferential interest rates. With the exception of customs privileges, these general incentives are similar to those offered to export-oriented foreign companies operating outside the zone. If they differ, EPZ investors normally would have an advantage. In addition to the general incentives described above, there are special incentives, such as capital grants and exemption from minimum wage or labour legislation requirements, which are specific to individual zones. As an example, Sri Lanka's package of incentives for investors is presented in table 2.

12. In setting up an incentive package for EPZs, host countries are faced with the difficult task of finding the proper balance between too stringent a package as to be inadequate in attracting investors and too generous a package as to be costly in terms of revenues foregone. There are other factors not specific to EPZs alone which constitute essential considerations for FDI in a particular country. These include a favourable investment climate, labour costs and productivity, transport costs and access to markets. 9/

B. Transnational corporations in EPZs 10/

13. Although no comprehensive information on FDI in EPZs is available, there is evidence that this sector, though still small, has been among the most dynamic sectors in attracting FDI in the past ten years. A far from negligible portion of FDI in manufacturing was directed to EPZs. In two countries with a significant EPZ sector, EPZs accounted for more than 85 per cent of FDI in Mauritius and over 70 per cent in Mexico. FDI inflows to the four oldest special economic zones in China amounted to some 30 per cent of total FDI inflows in 1989. 11/ TNCs' role in EPZ expansion has not been limited to equity participation. This has also taken the form of subcontracting arrangements with local firms operating in the zone.

Table 2
Sri Lanka: Incentives and other concessions applicable to foreign investment in area and licensed enterprises a/

Incentive or Concession	Period
Exemption from corporate income tax (tax holiday).	Up to a maximum period of 15 years reckoned from first year of profit as defined in GCEC Regulation No. 1 of 1978.
Concessionary rate of income tax at rates varying from 2 to 5 per cent on annual turnover which will be deemed to be profits.	Up to a maximum period of 15 years reckoned from the expiry of the tax holiday.
Exemption from tax on dividends paid to non-resident shareholders.	During lifetime of enterprise.
Exemption from dividend tax on dividends paid to resident shareholders out of exempt profits.	During tax holiday and for one year thereafter.
Income tax on royalties to non-residents.	Total exemption during tax holiday: thereafter at a rate not exceeding 15 per cent.
Exemption from income tax on emoluments paid to foreign employees.	During tax holiday.
Duty-free imports of plant, machinery, equipment, raw materials and other project related goods.	During lifetime of enterprise.
Duty free export of finished products.	During lifetime of enterprise.
Exemption from Import and Export Control Act.	During lifetime of enterprise.
Exemption from Exchange Control Act and authorization to open a Foreign Currency Banking Unit (FCBU) Account.	During lifetime of enterprise.
Exemption from payment of tax on transfer of shares to non-citizens.	During lifetime of enterprise.
Exemption from income tax on capital gains arising from the transfer of shares.	During lifetime of enterprise.
Relief for investment amount invested in the purchase of ordinary shares other than existing shares qualifies for deduction from purchaser's assessable income subject to established limits.	During lifetime of enterprise.

Source: Greater Colombo Economic Commission (GCEC).

a/ This applies to enterprises in the three operating EPZs (Katunayake, Biyagama and Koggala) as well as licensed enterprises located elsewhere with foreign investment which meet the following requirements: 90 per cent export-oriented for industrial products or 75 per cent export-oriented for agrobased products; a minimum initial capital outlay of not less than US$ 250,000; and funded from foreign sources. There is a separate package of incentives for other export-oriented ventures, with foreign investment which does not meet the above criteria.

14. Employment figures provide a rough order of magnitude for the importance of TNCs in EPZs. In 1986, TNCs accounted for close to two-thirds of EPZ employment in developing countries (excluding China). This represented 15 per cent of total employment of TNC subsidiaries in the area. Thus, their contribution has been significant and this employment has been growing at a very fast rate. The figure cited relates only to direct employment. If indirect employment were included, the importance of the role of TNCs in overall employment creation in the host countries would be considerably reinforced. Thus, foreign investors, perhaps by virtue of their size, seem to play a decisive role in shaping industrial structure and orienting the pattern of evolution of EPZs.

1. Type and origin of TNCs

15. Large well-known TNCs have been the prime targets of promotion efforts by EPZ authorities. However, it would appear that foreign investors in EPZs are essentially less experienced multinationals. Other general patterns that have emerged are: an important presence of large TNCs in EPZs that are heavily oriented towards the electronics industry, and a smaller proportion of large TNCs in EPZs with a more diversified industrial structure. Japanese investors account for a major share of large TNCs in EPZs. The relatively small presence of big more experienced European or United States TNCs could be mainly due to their already having established operations on a world-wide basis long before the first EPZs were set up. Moreover, their foreign investment decisions seem to be primarily dictated by global market strategy rather than production cost considerations. At the level of the host country, former colonial ties, ethnic relations and proximity to home countries or to principal markets influence the origin of investors.

16. Whereas well-seasoned global enterprises do not need an EPZ setting to survive as they have sufficient resources to operate successfully under normal conditions, the relatively risk-free environment and infrastructural support provided by EPZs are major, if not vital, attractions for aspiring TNCs and smaller firms. The emergence of a growing number of investors from developing countries is another interesting aspect of the EPZ phenomenon. For a number of them, investment in EPZs represents one of the first significant manufacturing ventures in a foreign country. Many of them come from the NIEs of Asia where domestic production cost pressures have pushed firms in labour-intensive industries to produce in EPZs of developing countries with lower labour cost. The loss of GSP status for their economies has also contributed to increased outward investment. The most conspicuous among these investors are Hong Kong enterprises. Developing country investors represent some 20 per cent of all foreign-owned enterprises in EPZs. As they are relatively small firms by world standards, their share in investment and employment would most likely be less significant. However, the contribution of these dynamic enterprises should not be underestimated. Aside from enhancing the opportunity to diversify foreign investment sources, they also provide an avenue for closer economic cooperation among developing countries, especially because they seem to have a high propensity to form joint ventures. 12/

2. Ownership structure of EPZs

17. The experience of developed countries suggests that the biggest contribution of foreign-owned affiliates to overall industrial and technological development of the host country is not so much the initial investment and accompanying technology transfer as the gradual process of integration into the economy and their progressive transformation into domestic enterprises. Thus, ownership structure is essential in determining the actual and potential developmental impact of EPZs. Table 3 presents the ownership pattern of EPZs in 13 countries. Because of the absence of three major EPZ economies in Asia (Singapore, Hong Kong and Taiwan, Province of China), figures should be viewed simply as indicative of the actual pattern. Contrary to expectations, fully or largely foreign-owned firms are not dominant, accounting for 37 per cent of the total number of enterprises. Since these firms are comparatively larger, their effective weight is, of course, greater.

Table 3
Ownership structure of EPZs in 13 countries a/

TYPE	NUMBER OF ENTERPRISES	PERCENTAGE SHARE
TOTAL	1 269	100.0
Foreign-owned	468	36.9
Domestically-owned	315	24.8
Joint ventures	486	38.3

Source: ILO-UNCTC (1988).

a/ Dominican Republic, El Salvador, Ghana, India, Jamaica, Republic of Korea, Liberia, Malaysia, Mauritius, Mexico, Philippines, Sri Lanka, and Trinidad and Tobago.

18. The significance of the strong domestic participation, especially if the share in joint ventures is included, lies in the potential contribution of EPZs in fostering the economic development of host countries, which appears to be greater than EPZ critics imply. The major weight of joint ventures may be due to incentives or more subtle forms of government pressure to associate locally-owned firms in new industrial ventures. In a few countries, like India, there are also legal restrictions on 100 per cent foreign ownership. The relative efficiency of the technology transfer process is one of the main advantages of joint ventures. The presence of a dynamic local business community tends to inspire confidence in a country's prospects. Active local partners are particularly attractive to foreign investors because they facilitate dealings with local administration and the labour force and provide easy access to supporting services. They also provide an element of stability which discourages footlooseness. In this regard, the footloose character

often associated with TNCs operating in EPZs has turned out, for the most part to be groundless. In reality, EPZ firms, once established, are fairly stable. FDI after all is not a short-term commitment and relocation costs and risks are quite substantial. 13/

3. Industrial structure of EPZs

19. One of the striking features of EPZs is the tendency to breed a distinct type of industrial monoculture, either in textiles and garments or in the electronics industry. This is reflected by the data in table 4 on the structure of employment by product group in EPZs of selected countries. While the use of employment figures is not completely satisfactory, they provide a fair approximation of production structure. As shown in the table, there is one dominant industry in each country: textiles and garments industry in Bangladesh, Dominican Republic, Egypt, Jamaica, Mauritius and Sri Lanka; and the electronics industry in Barbados, Brazil, Republic of Korea, Malaysia, Mexico and Taiwan, Province of China. Concentration rates vary among countries and zones. In Jamaica, Mauritius and Sri Lanka, the leading industry, textiles and garments, accounts for almost 90 per cent of total employment, whereas for the electronics industry, EPZs in Malaysia have the highest concentration rate of over 74 per cent.

Table 4
EPZ: Structure of employment by product group
(percentage share)

Country	Year	Textiles & garments	Electronics & electrical machinery	Transport Equipment	Footwear & leather products	Other
Bangladesh	1986	81.0	1.0	-	-	18.0
Barbados	1985	36.0 a	56.0	-	-	8.0
Brazil	1982	6.5	40.1	8.3	-	45.1
Dominican Republic	1987	59.0	6.0	-	13.0	22.0
Egypt	1980	54.0	-	-	-	46.0
Jamaica	1985	89.0	-	-	-	11.0
Korea, Republic of	1986	10.0	50.0	-	5.0	35.0
Malaysia	1979	14.2	74.5	-	-	11.3
Mauritius	1991	89.5	0.5	-	1.5	8.5
Mexico	1990	9.1	37.1	21.3	1.6	30.9
Sri Lanka	1981	89.9	2.0	-	-	8.1
Taiwan, Province of China	1983	17.0	54.0	-	4.0	25.0

Sources: ILO-UNCTC (1988) for Brazil, Egypt, Malaysia and Sri Lanka; Rhee, Katterbach & White (1990) for Dominican Republic and Republic of Korea; Kreye, Heinrichs & Fröbel (1987) for Bangladesh, Barbados, Jamaica and Taiwan, Province of China; Mauritius EIU Country Profile 1992-93; Quintanilla (1991) for Mexico.

a/ Includes footwear and leather products.

20. This distinctive industrial monoculture is certainly not a result of conscious policy decision as most EPZ development plans envisaged more diversified activities. It appears to be largely linked to the type of activities of the initial big investors. The nature of the two industries could perhaps explain their dominance. Both are large by world standards 14/ and contain production processes that tend to be very labour-intensive and are therefore attracted by low labour costs. Both were also undergoing structural changes in the 1970s and 1980s. By contrast, other industries that would have lent themselves well to an EPZ setting were too small to become dominant, or not sufficiently innovative, or else highly capital-intensive. As to the influence of foreign investors in shaping the industrial structure of EPZs, data seem to indicate a positive correlation between concentration rates and the share of foreign-owned enterprises. The domestic firms investing in EPZs are generally smaller and have a wider range of activities, which would tend to support the hypothesis of the important role TNCs play in this regard.

III. Economic and social impact of EPZs

21. The developmental impact of EPZs is largely determined by the size of the EPZ sector relative to the rest of the economy. However, performance indicators should also be viewed in the context of the role EPZs were meant to play in the industrialization strategy and the emphasis given by the host country to each of the objectives. The achievement of key objectives could provide sufficient justification for the existence of EPZs even if these EPZs are of little significance from the point of view of the entire economy.

22. The importance of the EPZ sector varies from country to country. In Macau and Mauritius, EPZs have provided the impetus for industrial growth and technological development. The prominent position of EPZs in the industrial sector of these two economies is unusual, and linked to their small size. The maquiladoras of Mexico are a major foreign exchange earner, second only to petroleum. In the Dominican Republic, the EPZ sector accounts for 3 per cent of GDP and about 40 per cent of total exports, and is the third largest net foreign exchange earner. 15/ While the EPZ in Brazil is less significant from the standpoint of the entire economy, it has fulfilled a catalytic role in regional development. In a number of developing countries, however, EPZs are of marginal importance.

23. There is apparently a healthy interaction between the performance of EPZs and the dynamism of the local economy. This is borne out by the fact that the most successful EPZs tend to be located in the fast growing NIEs. Undoubtedly, the internal dynamism of these countries has been a major attraction for EPZ investors as well as a growth stimulant for the EPZ sector itself. The latter in turn has helped to nourish the industrialization process.

24. As to the effectiveness of EPZs in achieving specific objectives, they have clearly contributed considerably to the generation of productive employment and the promotion of exports of manufactured goods. However, linkages with the domestic economy and technology transfer seems to have fallen short of expectations.

A. Employment effects

25. A major concern of most EPZs is job creation and it is probably in this area that they have been most effective. The estimate for direct employment in the EPZs of developing countries is 2.4 million in 1990 (table 1). It is likely to be considerably greater because unreported data could be substantial, especially in the case of China. Although accounting for only a fraction of total manufacturing employment, EPZs have been a very dynamic agent in generating new job opportunities. This employment-generating effect is all the more remarkable because it occurred at a time when the international economic climate was not favourable. Since 1970, EPZ employment has been responsible for over 60 per cent of new manufacturing jobs in Malaysia and Singapore and practically the totality in Mauritius. 16/

26. As to the indirect employment effect, the enclave nature of EPZs inhibits economic and social interaction with the local economy, and it is therefore more limited than for a typical foreign subsidiary operating outside the zone. It is, however, far from negligible. Most of the effect is due to wages and salaries of EPZ workers, a large portion of which is spent on local goods and services. ILO-UNCTC (1988) suggest an overall ratio of direct to indirect jobs of around 1:1.45, with 1.25 indirect effect due to wages and salaries of EPZ workers and 0.20 resulting from backward linkages. The indirect employment impact has a tendency to increase over time as TNCs become more familiar with local suppliers and customers.

27. That the type of employment created in EPZs consisted primarily of unskilled and semi-skilled jobs has to be seen in relation to the first round of the international division of labour, which mainly involved the transfer of labour-intensive operations requiring little skill and training. The industrial structure of EPZs dominated by the textiles and garments and electronics industries has resulted in the large-scale employment of women between the ages of 16-25. Female workers constitute between 70-90 per cent of the labour force in EPZs. Young women are favoured for this type of low-skill job because they are more productive, have better manual dexterity and are more adaptable to the monotony of assembly-type operations in the electronics industry than their male counterpart. In addition, wage rates for females are generally lower than for males.

28. This employment structure is not confined to EPZs but exists in industries performing the same operations whether located outside the zone or even in industrialized countries. The large-scale employment of young women is a dominant feature and perhaps the foremost social contribution of EPZs. They have given new opportunities and values to women without previous jobs and who probably would not have entered the salaried labour force in the absence of EPZs. Some critics view this aspect negatively, because it implies that EPZ jobs have little impact on unemployment and simply increase participation rates. However, in countries with a successful and important EPZ sector, after the new entrants had been absorbed unemployment rates declined.

29. The working conditions in EPZs have aroused serious social concern, relating to the lengthy working hours, night shifts for women, low unionization rates and low wages, among other things. Most of the criticisms apparently take standards in industrialized countries as a basis for

comparison. In general, EPZs adhere to local laws and regulations and there is no clear evidence that the rate of unionization and wages in EPZs differ significantly from the rest of the country. EPZ facilities are usually better than in local firms outside the zone. This is not to deny that some host governments, in an effort to make the zone more attractive to investors, have restricted the application of local labour laws and controlled union activities, or that some abuses such as malpractices in the trainee system and practically forced overtime work have been committed and perhaps are still being practised. As far as the high labour turnover rate in EPZs is concerned, this may be more related to social factors rather than work-related stress, as the upper age limit corresponds with the mean age of marriage. Lack of promotion opportunities may be an additional push factor.

B. Export promotion and foreign exchange earnings

30. One of the principal objectives for the establishment of EPZs is to promote exports of manufactured goods. Table 5 presents the export performance of EPZs in selected countries in relation to total exports and exports of manufactures. There is a wide divergence in the share of EPZs ranging from about 1 per cent of total exports for the Republic of Korea to 65 per cent for Mauritius. The minor contribution of EPZ exports in the Republic of Korea and Taiwan, Province of China does not imply that their EPZs are ineffective; indeed they are considered successful. Rather, these two countries already have a fairly developed industrial structure and EPZs simply form a part, and not a very significant one, of the overall export-oriented industrialization strategy.

Table 5
Export performance of EPZs in selected countries
(values in million US$, shares in percentages)

Country	Year	EPZ exports	Share in exports	
			Total	Manufactures
China	1989	4 270	8	12
Dominican Republic	1989	692	43	51
Jamaica	1987	100	14	66
Korea, Republic of	1986	460	1	1
Malaysia	1982	1679	14	49
Mauritius	1990	772	65	96
Mexico	1989	12 500	35	53
Philippines	1990	580	7	16
Sri Lanka	1990	437	23	44
Taiwan, Province of China	1987	2 400	4	5
Trinidad & Tobago	1983	210	9	64

Source: UNCTAD secretariat, based on United Nations Statistical Office data on total and manufactured goods (SITC5-8) exports and on national and other international sources for EPZ exports.

31. Gross exports are, however, not an adequate measure of the effective foreign exchange benefits to the host country. The inherent bias in EPZs for imported production inputs, and close links between subsidiaries and parent companies which favour intra-firm trade, reduce considerably the contribution to the balance of payments. Capital repatriation and profit remittances further reduce the BOP impact. The net export ratio (EPZ exports minus imports/total EPZ exports) could be used as an indicator of economic benefits as well as of the degree of backward linkages. This ratio is fairly high for Indonesia, Republic of Korea and India but relatively low in Malaysia and Sri Lanka despite substantial EPZ exports. In Brazil's Manaus Zone, the net export ratio is actually negative because sales of processed products are mainly for the local market.

32. Caution must be exercised in interpreting net export ratios. These may be very low or even negative in the initial period when imports of capital equipment and construction materials are high. The net export performance may also not be very meaningful in assessing older EPZs when sales to the domestic market become of significant scale as part of the process of integration with the local economy. This could take place at the expense of the net export ratio.

C. Cost-benefit analysis 17/

33. Cost-benefit analysis is a useful tool in estimating the economic profitability of an EPZ. The main benefit to the host country is the foreign exchange retained as a result of payments made by EPZ firms for the use of domestic resources (such as labour and production inputs) and for taxes. As the cost-benefit analysis converts foreign exchange into domestic currency according to its scarcity value, that is on the basis of the shadow exchange rate, any benefit accruing from the differential between shadow and official rates is also taken into account. To derive the net benefits to the host country, the social opportunity costs (based on shadow prices) of labour, production inputs and domestic borrowings must be subtracted from payments by EPZ firms. Subsidies, administrative costs and the capital cost, including maintenance, of the infrastructure of the EPZ must also be deducted. The net present value is then calculated by discounting the net benefits over the anticipated life of the zone.

34. The results of the cost-benefit analysis of EPZs in four Asian countries undertaken by Warr, one of the few studies of this nature, are presented in table 6. The main sources of gain derive from employment and foreign exchange conversion, except in Indonesia where taxes and revenues are of major importance. The expenditure on the drawback scheme, a subsidy granted by Indonesia for the use of domestic raw materials, amounted to $7 million, which is greater than the estimated net gain of $5 million from the use of such materials. 18/ In Malaysia, the subsidy on electricity outweighed the combined benefits from the use of local raw materials and capital equipment plus tax revenues raised. The most striking feature of this analysis is the negative net present value of the Philippines' Bataan EPZ, which is largely due to the enormous infrastructure costs and the cost of granting EPZ firms subsidized access to Philippine capital markets. 19/ Each of these two items is large enough to outweigh all benefits from the zone.

35. The principal limitation of the cost-benefit analysis is that the long-term projections underlying it are by their nature uncertain and depend on heroic assumptions concerning shadow prices and the discount rate. It is also less suited for evaluating an EPZ than for a conventional industrial project. It may give an indication of the internal profitability of an EPZ but says little about its external competitiveness. The success of an EPZ in attracting foreign investors depends crucially on how competitive it is in relation to other zones located elsewhere. There are other elements as well, such as demonstration effects and other externalities, essential in decision making, which may not be captured by this type of analysis.

Table 6

Cost-benefit analysis of four EPZS in Asia a/
(values in million US$ at 1982 prices)

	Indonesia	Korea, Rep.of	Malaysia	Philippines
Employment	4	39	111	59
Foreign exchange conversion	0	65	94	72
Domestic raw materials	5	16	18	3
Domestic capital equipment	0	0	10	0
Taxes and other revenue	23	18	10	11
Electricity use	-1	-13	-53	-4
Administrative costs	-13	-17	- 4	-23
Infrastructure costs/subsidies	-3	-68	-43	-196
Domestic borrowings	0	0	0	-147
TOTAL NET PRESENT VALUE	15	40	143	-225
(Internal rate of return (%))	(26)	(15)	(28)	(-3)
(Estimated ratios of shadow prices to market prices)				
Labour	0.75	0.91	0.83	0.64
Foreign exchange	1.00	1.08	1.11	1.25
Domestic raw materials	0.85	0.92	0.90	0.96
Domestic capital equipment	0.85	0.98	0.91	0.96
Electricity	1.05	1.33	0.93	1.30
Domestic financial capital b/	n.a.	n.a.	n.a.	1.58

Source: Warr (1992).

a/ Indonesia-Jakarta EPZ; Republic of Korea-Masan Free Export Zone; Malaysia - Penang Free Trade Zone; and Philippines - Bataan EPZ. For consistency, a real discount rate of 7.5 per cent and a total life for the EPZ of 25 years were assumed.

b/ N.a. means not applicable.

D. Transfer of technology and skills

36. The role of EPZs as a channel for the acquisition of technology and skills has been limited by the nature of the production processes undertaken there. As mentioned earlier, industrial activities in EPZs are largely dominated by the labour-intensive processes in either the textiles and garments industry or the electronics industry, which involve a relatively low level of technology. While the electronics industry could be considered a high-tech industry, usually only the assembly stage of the production process takes place in EPZs. The technologically sophisticated processes, such as research and development and the pre-assembly stages, are located in the head offices of TNCs.

37. The skill requirements in EPZ operations are generally of low level and demand little training. Thus, EPZs have minimal effects in raising the skills of the labour force. Moreover, the specialized nature of some of the tasks performed may be of little use in other sectors. Mid-level managers and technicians receive training but their number, though growing, is still quite limited. Progressive automation and more sophisticated processes have been observed in an increasing number of plants. These would necessarily entail the employment of skilled operators but many of the unskilled workers would be replaced by machines. Sometimes therefore there is a conflict between the employment and technology transfer objectives. The industries most likely to bring desired technology transfers are those producing capital goods and intermediate products requiring substantial investment outlays but offering limited job opportunities.

38. Technology and skill transfers are, however, not negligible although they take place essentially within the EPZs, especially in joint ventures between TNCs and locally-owned enterprises. This collaboration is the most direct and efficient way of acquiring knowledge in modern management techniques and work organization, export marketing and finance, in addition to new and advanced technology. The enclave nature of the EPZs also facilitates close contact and a substantial exchange of information and know-how between unrelated firms. While quantitatively not significant, inter-firm movements of technicians, mid-level management and production workers also provide another avenue for these transfers. The mobility of skilled workers from TNCs into domestic firms, whether inside or outside the EPZs, contributes to private enterprise development and the dissemination of technology.

39. Demonstration effects could well represent one of the most important contributions of EPZs to the host country. The sheer visibility of EPZs because of their geographical delineation and usual proximity to main centres of economic activity attracts attention from the local community, particularly the industrial sector, and generates learning effects which could have a modernizing influence on the economy. For the workers, many of whom have had no previous experience, their exposure to a modern industrial setting with its quality control, respect for deadlines, organizational discipline and spirit of innovation and enterprise is a very valuable asset.

40. It might be useful at this point to cite concrete cases where EPZs have provided a fertile ground for learning and technology transfer. In the electronics industry of Malaysia, there has been a transformation towards

integrated capital intensive high-tech plants. Integration has reached a very advanced level and the technical organization of production and personnel skill requirements have changed substantially. The share of employees not directly involved in production, such as technicians, supervisors and engineers, now averages 28 per cent of total employment, compared to 5 per cent in the early years of operation. Important management posts have been filled by Malaysians as TNCs became aware of the advantages this offered in terms of costs and acceptance of local workers. 20/ A similar increase in the number of local managers and technicians has occurred in EPZs in the Dominican Republic and Mexico. In Mexico, more advanced technologies and sophisticated industrial processes have also been introduced in the maquiladoras.

E. Linkages with the domestic economy

41. The effectiveness of EPZs as an instrument for achieving the long-term development objectives of the host countries largely depends on the degree of integration with the domestic economy. Undoubtedly the technological spin-offs arising from interactions between foreign and local enterprises and workers within the zone are valuable, but equally important are those resulting from linkages created with the rest of the economy. The linkage potential of EPZs has only been realized to a small degree. So far, the major economic linkages concern service-oriented activities and the effects of consumer goods purchases by the EPZ labour force. Perhaps the more stimulating forms of linkage from the point of view of technology diffusion are backward linkages, either in the form of subcontracting or domestic sourcing, and forward linkages through the sale of zone products locally. There is an inherent bias in the EPZ set-up which hinders the creation of such linkages, although host countries have generally encouraged EPZ firms to purchase local inputs. Import-intensive operations are encouraged by special concessions on imports. The export orientation of EPZs and strict regulation of local sales of zone products limit the development of forward linkages.

42. There are a number of factors that determine the degree of backward linkages. 21/ The most important of these is the level of industrial development of the host country. A well-developed industrial base with the capacity to produce goods that are internationally competitive in terms of price and quality would encourage domestic sourcing. Foreign firms are generally motivated by commercial considerations and there is an obvious transport cost advantage in getting supplies in the area. Moreover, establishing contacts with domestic firms could lead to growing involvement in the local economy which could open up the possibility of increasing local sales in the future. There is, of course, some time element involved in identifying competitive and reliable supplies and in establishing commercial relationships.

43. The degree of linkage varies with the type of industry and in particular the production process, the technological complexity and the extent to which economies of scale can be achieved. The fragmentation of the production process in the electronics industry and high economies of scale in component manufacturing could lead to an intensive reliance on subcontracting arrangements. Subcontracting is also a very efficient way of fostering integration and diffusing technology. As far as domestic sourcing is

concerned, linkage propensity is different for each industry and depends on raw material availabilities. For example, food and chemical industries are known to have high multiplier effects.

44. The extent of backward linkages also depends on overall corporate strategy. Close links between subsidiaries and parent companies limit the possibility of establishing relations with local firms. The policy of some TNCs favouring intra-firm trade not only assures them of acquiring within their own network high quality standardized products but also offers the opportunity of transfer pricing. Corporate strategy is to a large extent conditioned by the origin of foreign firms. Exports by Japanese TNCs, which have a strong preference for forming joint ventures with local partners, are channelled through trading houses, from which these TNCs get a very large proportion of production inputs.

45. Joint ventures play a catalytic role in opening up real prospects for the promotion of domestic activities. It has been observed that joint ventures are more inclined to buy local raw materials than fully foreign-owned firms. 22/ The latter tend to rely more on imported inputs, mainly because of reliability of supply and the need to preserve technological know-how within their production network. Of course, reliance on domestic sourcing is even greater for indigenous enterprises in EPZs.

46. Another factor that has a bearing on the use of domestic supplies is the trade policy of developed countries encouraging the use of their own raw materials and intermediate goods. A major factor responsible for the very low domestic content of goods produced by the Mexican maquiladoras relates to tariff rules in the United States, which allow duty-free re-imports of goods except for the value added generated abroad. 23/ The North American Free Trade Agreement (NAFTA) could reduce the disadvantage for Mexican suppliers.

47. As far as the EPZ experience of developing countries is concerned, in the large majority of cases backward linkages have not developed to any significant degree. The principal obstacle is the poor and unreliable quality of local supplies. In the Dominican Republic, Malaysia, the Philippines and Sri Lanka, the share of domestic raw materials is quite low. However, domestic purchases and subcontracting have developed to an exceptionally high degree in EPZs in the Republic of Korea, where, in 1985, domestic sourcing constituted more than 30 per cent of production inputs and out-zone subcontracting represented 21 per cent of total labour payments. 24/ Encouraged by the drawback scheme, domestic raw materials used in Indonesian EPZs reached 41 per cent of the total in 1982. In Mauritius, the proportion of locally purchased inputs to intermediate consumption (37 per cent in 1982) is also quite high by EPZ standards.

48. With regard to forward linkages, exposure to competition could have a stimulating effect on the local economy, leading to upgrading of the level of technology, enhanced research and development activities and greater innovation. To prevent unfair competition with firms outside the zone, customs duties are normally imposed on the products sold by EPZs. These local sales at times benefit consumers because prices for better quality products are lower than those charged by out-zone producers. Usually, access is allowed for the sale of seconds or rejects in consignments that failed to meet

deadlines. Some countries like Brazil and Colombia have a more liberal approach on this matter, with a view to developing the industrial base of particular regions. As mentioned earlier, Brazil is an extreme case where EPZ production is mainly geared to the domestic market. While not originally envisaged, forward linkages had reached 30 per cent of exports from EPZs in the Republic of Korea by 1985.

IV. Overall assessment

A. Prerequisites for success

49. There have been remarkably successful EPZs as well as EPZs which have failed to take off years after they had been established. While a conducive international climate has a bearing on the performance of EPZs, impressive successes have occurred at a time when the world economic environment has not been particularly bright. That a favourable overall policy framework is a key element to success is borne out by the fact that the most successful EPZs are located in countries which have adopted an outward-looking industrialization policy. A healthy investment climate is crucial because it is the propensity to attract a sufficient number of foreign investors and to achieve high rates of occupancy that will essentially determine the take-off stage and the success of an EPZ. Due to the relatively large initial investment involved, it is important for the zone to become operational right away.

50. However, a proper investment climate is not sufficient. A number of failures can be attributed to poor planning and design, insufficient promotion and mismanagement. The zone authority or administering agency has a central role to play in the viability of the zone. Rapid and efficient service is indispensable in maintaining the interest of prospective and current clients. Despite the fact that EPZs were meant to provide simplified administration or the ideal "one-stop service", some EPZs are plagued by complex laws and regulations and administrative red tape. This could be due to deficient institutional arrangements between the zone authority and various government agencies whose support is necessary for the development of the EPZ. It is important that zone managers keep in tune with the changing needs of investors who now demand a wider range of services, so that well-developed infrastructure and buildings are no longer sufficient. The commitment to long-term viability requires flexibility and a continuing reassessment of the growth potential; marketing and promotion; and the assurance that EPZ operations are properly integrated into the overall economic and industrial development strategy of the country.

51. Lack of promotion or costly but ineffective promotion have been cited among the factors responsible for the failure to attract investors. Increased competition between EPZs has made it imperative to devote resources to promotion. But, to keep costs within bounds, target areas for reaching potential investors must be established based on product research assessing the zone's comparative advantage. A well-executed promotion programme would combine advertising in trade publications with direct contacts with potential clients which should include not only large TNCs but small- and medium-sized firms as well. 25/

52. Of course, no amount of promotion can overcome the disabilities inherent in a zone. Usually heading the list of the causes for failure are poor location and inadequate infrastructure. These are failures at the planning and design stages. Some EPZs were built in underdeveloped areas with poor transport and communication networks. Unreliable telecommunication facilities and electricity supplies create costly bottlenecks. It is also difficult to attract the critical number of investors needed for take-off in backward regions.

53. Financial failures have resulted from excessive development costs involving ambitious infrastructure facilities and luxury buildings that have remained unutilized. The success of EPZ regimes and the recent Philippine experience 26/ demonstrate that construction of expensive zones is not necessary. Moreover, experience in some countries (the Dominican Republic and Mexico) has shown that site development and factory construction can be managed effectively by private enterprises. With regard to operating costs, it is important that the administering agency keep close control over them and avoid bureaucratic red tape.

54. Intense competition among EPZs of developing countries to attract investors or prevent relocation of existing plants has exerted pressure to offer increasingly generous incentives, thus eroding their net benefits. For example, lengthy tax holidays, which initially was not deemed necessary to attract FDI, have become an almost indispensable feature of an incentive package. Harmonization of incentives is, therefore, an issue which deserves attention by developing countries. 27/

B. The evolution and future of EPZs

55. The tendency for EPZs to go through a common life cycle may be due to the fact that most of them were based on the same models and operate in a competitive international environment. The initial phase of this cycle is characterized by significant FDI flows with one industry becoming dominant. As the years go by, the relative importance of the dominant industry declines and exports expand as the occupancy rate in the zone reaches its maximum. As the EPZ matures, FDI flows tend to level off, exports increase at a slower rate and marginal firms are replaced by larger enterprises employing workers with better technical training. The latter may partly explain the tendency of the share of women workers to decline at this stage. This phase is also characterized by a rise in unionization rates. The final phase is marked by a relative decline of fully foreign owned subsidiaries and increasing sales to local markets by EPZ firms. Towards the end of the cycle, the role of the EPZ is reappraised, which could result in either its conversion to the processing of more sophisticated higher value-added products requiring a change in the skill requirements of the labour force or its gradual phasing out as its industrial structure becomes capable of developing independently. 28/

56. This life cycle has a bearing on the observed evolution of EPZs from the original concept. The main features of their evolution are:

- The change in the enclave character of EPZs. There are two possible paths, both leading ultimately to the emergence of an export processing country, with conditions similar to those in Singapore or Hong Kong, where the entire country or territory has acquired EPZ status. One type of evolution involves a shift from a territorial to a statutory concept. Instead of being concentrated in a well-defined area, firms enjoying EPZ privileges and concessions can be established anywhere in the country. The benefits of an EPZ regime are: (a) it can promote specific types of activity irrespective of location; (b) it can develop stronger linkages with the domestic economy; (c) it can allow enterprises to choose the optimal location for their activities, especially where proximity to supply is important for economic or technical reasons; and (d) it can foster industrialization in poorer regions and ease congestion in main centres of economic activity where EPZs are usually situated. The other possible evolution is for an EPZ to become a large territory rather than a small industrial enclave. This is exemplified by China's special economic zones, which cover large areas and even an entire province in the case of Hainan Island EPZ.

- A more liberal attitude towards import processing. The factors that led to the relaxation of restrictions on domestic sales of EPZ products are: (a) the difficulty of controlling smuggling from the zone into the domestic market; (b) the need to dispose of rejects and seconds; (c) government policy to encourage linkages with the local economy; and (d) pressures from consumers who would like to have access to high quality goods produced in the zone, and from investors who are attracted by the additional source of profits. Access to local markets seems to be a more effective incentive to foreign investors than the usual concessions offered in an EPZ package, especially in countries with a large domestic market. In its extreme form, this type of evolution is illustrated by the Manaus Free Zone in Brazil.

- The growing participation of domestic enterprises. Local firms and joint ventures between domestic and foreign firms now constitute around two thirds of all EPZ enterprises in developing countries. This evolution is partly due to the economic necessity of filling up the gap in occupancy left by foreign investors. It also results from political pressures to grant local enterprises the same privileges and concessions given to foreigners. Their presence in the zone could contribute just as much, if not more, to the creation of employment, the generation of exports and foreign exchange earnings, and technological upgrading. Moreover, they are an element of stability in the zone as they can be expected to be more firmly established than their foreign counterparts.

- Extension of activities to services and other sectors. The growing service orientation in EPZs reflects the increasing importance of the services sector in economic activities and the increased tradeability of services. Some EPZs now offer financial services, such as banking and insurance, as well as data services. These activities could be further extended to cover tourism and educational services and even some forms of agri-business. The data processing enclave enterprises in Barbados are quite significant. Thailand established an export-oriented data service zone in 1989. In the special economic zones of China, investment in a wide range of economic activities is encouraged. In addition to manufacturing, these activities include real estate, tourism, commerce, transport, finance and agriculture.

57. It is hard to determine the extent to which national policy has shaped the pattern of evolution of EPZs. What is evident, however, is that EPZs are evolving in a manner which tends to promote greater integration with the local economy and a wider diversity of activities. EPZs can best serve long-term development objectives if they can operate as an integral part of the domestic economy. Could this process of integration be hastened by national policies? Experience has shown that, unless the local economy can deliver high quality goods and services at internationally competitive prices, it would be difficult to induce linkages by measures such as specifying minimum levels of local content. However, governments of host countries can exert some influence either through encouragement and incentives or by applying more focused approval criteria for investments. Perhaps the most important contribution governments can make to foster the development of EPZs is to provide a conducive policy framework for investment.

58. The evolution of EPZs is manifested in the diverse structures of existing EPZs. This diversity implies a wider range of options for countries planning to establish a zone. An EPZ can thus be built to suit the specific needs and objectives as well as the situation of a country wishing to use it as a policy instrument. It must be stressed that EPZs are just one possible measure whose merits and disadvantages have to be weighed against those of other schemes to promote exports and industrialization. Alternatively, EPZs can be used as a complement to these other measures to form an integrated industrial development strategy package.

59. As to the future of EPZs, their resilience would depend on whether they are conceived as dynamic mechanisms that can respond to changing economic conditions. There is a continuing need to monitor performance and review functions and objectives so as to be able to meet challenges emerging from the structural changes in both the domestic and the international economy, including the changing demands of foreign investors.

60. The advanced degree of industrial automation stemming from microelectronic technology has significantly reduced the share of labour costs in overall production. Thus, although cheap labour would continue to be relevant, it is no longer a sufficient precondition to induce FDI flows. The current worldwide industrial restructuring with emphasis on electrical machinery, machine tools and other higher technology industries makes high demands of EPZs. Additional locational assets, such as a highly skilled

labour force and the availability of a comprehensive industrial support network and essential industrial services, are now sought for. Economies o scale assume a crucial role in recovering the heavy investment outlays required by these types of production process. Investors, therefore, put a premium on strategic locations which allow them to serve export markets whi at the same time tapping the domestic markets of host countries. This coul lead to a higher concentration of FDI flows in only a few countries that ar able to meet all the requirements. Of course, labour-intensive projects would still be suitable for many EPZs at the initial phase of their operati or for EPZs of less advanced developing countries. 29/

61. Increased technological inputs and automation are already observable number of EPZs. Some are also exhibiting types of production that go beyon mere assembly, such as vertically integrated production processes for full manufactures of quite sophisticated products including motor bikes, engines and cameras. These are welcome developments as they would lead to higher local value added and would require greater diversity of occupational skill

62. To conclude, the new FDI trends and patterns demand the provision of much wider range of functions and services from EPZs. This requires the upgrading not only of the skills and educational levels of the labour force but also of the technological infrastructure of the zone. The long-run gro and development of EPZs will therefore depend on whether they are well equipped to meet this challenge.

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Notes

1/ Basile and Germidis (1984).

2/ Bataan EPZ (Philippines), Kandla FTZ (India) and Manaus Free Zone (Brazil).

3/ Cheap energy for the Point Lisas FTZ (Trinidad and Tobago) and electric power for the Tema Industrial Free Zone (Ghana).

4/ At the Manaus Free Zone, domestic sales increased from 71 per cent of total sales in 1968 to 96 per cent in 1980 (Possas, Furtado and Carvalho (1987)).

5/ An earlier example can be found in the Bahamas where the Authority of the Freeport Grand Bahama, which was created in 1955, was given a mandate to develop industry (Hein, P. (1988)).

6/ UNCTAD (1985).

7/ ILO-UNCTC (1988).

8/ The 12 countries and territories are: Mexico, Singapore, Dominican Republic, Hong Kong, Malaysia, Mauritius, Brazil, Taiwan, Province of China, Macau, Sri Lanka, Indonesia and Tunisia.

9/ These factors are discussed in UNCTAD (1993).

10/ This section is largely based on ILO-UNCTC (1988).

11/ Grub and Lin (1991).

12/ Maex (1983). Based on figures from EPZs in Malaysia, the Philippines and Sri Lanka, only 14 per cent of the enterprises from the developing countries were wholly foreign-owned, compared with 82 per cent for US-based TNCs and 56 per cent for TNCs from other industrialized countries.

13/ See Hein, C. (1988) for the Mauritian experience.

14/ Compared with, for example, machine tools, instruments and optical goods industries.

15/ The Courier, January-February 1992.

16/ ILO-UNCTC (1988).

17/ Warr (1992).

18/ Drawback schemes are intended to counteract the effects of protection on the costs of the imported components of such raw materials through the refund of customs duties paid.

19/ Most of the private capital invested in the Bataan EPZ or 91 per cent was raised domestically, and domestic borrowings accounted for 95 per cent of these domestically raised funds.

20/ Liebau and Wahnschaffe (1992).

21/ See UNIDO (1980) and Healey and Lütkenhorst (1989).

22/ Maex (1983) based on ARTEP Survey in Malaysia and the Philippines and studies on the Republic of Korea and India.

23/ In 1985 domestic sourcing of the maquiladoras accounted for only 1.4 per cent. More recent information on in-bond garment producers indicates local content of 1.8 per cent.

24/ Healey and Lütkenhorst (1989).

25/ Bolin (1989).

26/ The three EPZs established after the Bataan EPZ, which together accounted for only 15 per cent of cumulative development costs, have individually achieved similar (if not better) economic results to those achieved by the Bataan EPZ (data from EPZA (1992)).

27/ On the effectiveness of FDI incentives, see UNCTAD (1993).

28/ On the life cycle and evolution of EPZs, see ILO-UNCTC (1988); Basile and Germidis (1984); and UNCTC (1991).

29/ See UNIDO (1989).

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UNITED
NATIONS

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United Nations Conference
on Trade and Development

Distr.
GENERAL

TD/B/WG.1/7
29 April 1993

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Ad Hoc Working Group on Investment and
Financial Flows; Non-debt-creating
Finance for Development; New
Mechanisms for Increasing Investment
and Financial Flows
Second session
Geneva, 28 June 1993
Item 2 of the provisional agenda

CONSIDERATION OF GLOBAL TRENDS AND ISSUES, INCLUDING FOREIGN INVESTORS' MOTIVATIONS

Foreign direct investment in developing countries: Recent trends and policy issues

Report by the UNCTAD secretariat

GE.93-51680 (E)

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Summary and conclusions

(i) Globalization of the world economy is best illustrated by the spectacular growth of foreign direct investment (FDI) during the second half of the 1980s. The global stock of FDI more than tripled over the past decade. The conjunction of many factors - deregulation, liberalization of financial markets, trade and FDI regimes, progress in communications, rapid pace of mergers and acquisitions and of technological innovations - contributed to spread economic activities beyond national boundaries. The early 1990s, however, witnessed a major downturn in global FDI flows, linked to continued economic uncertainty in developed countries.

(ii) Since the mid-1980s, the rate of growth of FDI flows to developing countries has steadily increased, following a modest expansion in the first half of the 1980s in the aftermath of the debt crisis. In the early 1990s, developing countries experienced a large increase in FDI, driven by the resurgence of growth in several Latin American countries, continuing strong growth performance in South and South-East Asia, and the steady trend towards privatization and liberalization of FDI regimes in all developing regions. As a result, developing countries' share of global FDI had risen to 25 per cent by 1991, signalling a return to earlier levels.

(iii) The distribution of FDI inflows among developing countries continues to show a high concentration in a small number of countries. In a world of internationalization of production through FDI, which is changing the dynamic comparative advantage of host countries and affecting their growth in a significant way, countries that are not included in this FDI-led globalization process run the risk of economic marginalization. In the medium term, as the incentive provided by high trade barriers becomes less relevant, FDI flows could be even more concentrated in countries endowed with large growing markets.

(iv) The location of FDI results from the interaction of three sets of factors. First, the decision to invest abroad derives from the global strategies of the transnational corporations (TNCs), which geographically allocate their activities according to market opportunities, technological requirements and rationalization of their production process. The recent technological progress and changes in industrial organization have shifted emphasis from factor costs (especially unskilled labour costs) to market considerations and availability of skilled labour as the driving forces behind the decision to undertake FDI. Second, once the decision to invest abroad is taken, the level of development, growth prospects and market size of potential host countries are important determinants in the location of FDI. Third, host country policies are factors which shape the profitability of investment by reducing or increasing the risks and uncertainty that might affect production and the return of investment, and by providing direct support to or hindering foreign investors' activities.

(v) For host countries, the policy agenda for increasing FDI inflows and for drawing maximum benefits from them includes the following priorities: ensuring a stable economic environment conducive to sustained growth; encouraging the development and upgrading of local industrial and technological capacities; and strengthening infrastructure and human resource development.

(vi) FDI could help to accelerate technological upgrading and industrialization, but cannot be the only engine for growth and industrialization. A thriving local industrial sector is, on the one hand, a factor which attracts FDI and, on the other hand, a conduit for technology transfer to host countries.

(vii) FDI based on high technology and skilled labour will benefit only a small number of advanced developing countries in the medium term. However, many industrial branches, especially those producing standardized manufactured goods, still require labour-intensive and low-technology inputs. FDI in these sectors, although globally less important, will remain significant for a large majority of developing countries. Furthermore, the descaling at the plant level in many sectors opens up new possibilities for locating production in smaller developing countries.

(viii) For poorer countries which lack the capacity to undertake comprehensive efforts to develop local capacities, there is an urgent need for more active support by the donor community in such areas as strengthening the private sector and local entrepreneurship, building institutional capacity, developing and improving physical infrastructure, and enhancing human resource development.

(ix) At the regional level, since FDI has increasingly become market driven, host countries would increase their locational attraction if closer linkages with neighbouring economies are established in order to generate larger markets and complementary locational advantages.

(x) At the international level, competition among host countries to attract FDI has led to an investment tussle, which in the end could be very costly for competing countries. These countries get trapped in the "prisoner's dilemma", which leads to competitive bidding in which all participants are left worse off than if no bidding had taken place. A first step towards reducing unnecessary costs would be to ensure more transparency on FDI policies. Countries could exchange information about their regulatory regime and other FDI-related policies, as well as the impact of these policies on FDI flows, with a view to sharing experiences on the costs and benefits arising from these policies. This exchange of information could eventually lead to the harmonization of incentive policies. From the perspective of TNCs, increased transparency of investment policies would enable them to make better FDI decisions in an overall improved policy environment for their international activities.

(xi) At the same time, the globalization of production increases the economic power of a few large TNCs. The evolving oligopolistic character of world production, reinforced by the growth of networks and strategic alliances extending beyond national borders, might serve to limit competition among firms but would increase rivalry among developing countries. This could weaken the capacity of many developing countries to negotiate successfully with TNCs. This also raises the question of how to maintain competition between firms increasingly linked through networks and alliances.

I. Salient features of recent foreign direct investment (FDI) trends

A. Growth of worldwide FDI flows

1. The period 1986-1990 witnessed an unprecedented expansion in worldwide FDI outflows. Their annual rate of growth averaged 28 per cent in current dollars 1/ or 18 per cent in real terms 2/ (table 1). By 1990, global outflows had reached $234 billion, or about four times the average level registered during the decade 1975-1984. As a result, the global stock of FDI more than tripled from about $500 billion in 1980 to $1.7 trillion in 1990.

2. In contrast to the boom years of the late 1980s, the early 1990s recorded the first major downturn in global FDI outflows since 1982. In 1990, global FDI outflows grew at 10 per cent in current dollars, but declined by 1 per cent in real terms; they then fell by 26 per cent in real terms in 1991 as a result of continued economic uncertainty in developed countries. However, preliminary data for 1992 indicate that the rate of decline has bottomed out (table 2).

B. FDI trends in developing countries

3. Throughout the 1980s and early 1990s, the rate of growth of FDI inflows to developing countries has steadily increased. During the first half of the 1980s, FDI inflows to developing countries grew only modestly, hampered by the weight of the debt crisis (table 1). In the period 1986-1990 inflows grew at an annual average rate of 21 per cent in current dollars (or 12 per cent in real terms), encouraged not only by improved macroeconomic conditions but also by the liberalization of foreign investment regimes and the introduction of specific measures such as debt-equity swaps and privatization programmes in many developing countries. FDI inflows to developing countries increased by 21 per cent in 1991 (to US$ 36 billion), and by about 11 per cent in 1992 (to some US$ 40 billion) due in large part to a substantial increase in reinvested earnings. 3/

4. During the period 1986-1990, developing countries received only 17 per cent of worldwide FDI inflows. By comparison, their share stood at 25 per cent during the 1980-1985 period (table 3). As a result of the recent upsurge in inflows coinciding with a sharp fall in global flows, the developing countries' share jumped to 25 per cent in 1991 signalling a return to earlier levels. This new dynamism was led by the recovery in several Latin American countries and continuing strong growth performance in South and South-East Asia. Since 1987, FDI has become an important component of external resource flows to developing countries, rising from a trough of just over 17 per cent in 1987 to about 26 per cent in 1991. 4/

Table 1

Inflows and outflows of foreign direct investment, 1986-1991

Country	1986	1987	1988	1989	1990	1991	1980-1985	1986-1990	1991	1980-1985	1986-1990	1991
	(Billions of dollars)						Share in world total (%)			Growth rate (%)		
Developed countries												
Inflows	64	108	129	165	172	108	75	83	74	-3	28	-37
Outflows	86	132	162	203	226	174	98	97	97	-2	27	-23
Developing countries												
Inflows	14	25	30	28	30	36	25	17	25	4	21	21
Outflows	2	2	6	10	8	5	2	3	3	1	41	-35
All countries												
Inflows	78	133	159	193	202	147	100	100	100	-1	27	-27
Outflows	88	135	168	213	234	180	100	100	100	-2	28	-23

Source: United Nations, World Investment Report 1992 (ST/CTC/130), United Nations publication, Sales No. E.92.II.A.19, and 1993 (forthcoming).

Table 2

Outflows of FDI from five major home countries, 1986-1992

Country	1986	1987	1988	1989	1990	1991	1992a/	1980-1985	1986-1990	1991	1980-1985	1986-1990	1991
	(Billions of dollars)							Share in world total (%)			Growth rate (%)		
France	5	9	14	19	35	24	14	6	10	13	-6	63	-31
Germany	10	9	13	18	28	21	16	8	9	12	4	29	-24
Japan	15	20	34	44	48	31	16	10	19	17	22	34	-36
United Kingdom	18	31	37	36	18	19	16	20	17	11	-1	0	7
United States	14	26	14	26	29	29	50	26	13	16	-16	20	-0.4
Total b/	61	95	112	143	158	124	112	69	68	69	-5	27	-21

Source: United Nations, World Investment Report 1992, and 1993 (forthcoming).

a/ Preliminary estimates.

b/ Totals may not add up due to rounding.

Table 3

Inflows of foreign direct investment to developing countries/territories, 1980-1991

Country/territory	1980-1985	1986-1990	1991	1980-1985	1986-1990	1991	1991
	Average (billions of dollars)			Share in total (%)			Growth rate (%)
All countries	50	150	147	100	100	100	-27
Developing countries	13	26	36	25	17	25	21
Africa	1	3	3	3	2	2	45
East, South and South- East Asia	5	14	19	9	9	13	12
Latin America and the Caribbean	6	9	13	12	6	9	36
Least developed countries	0.2	0.2	0.2	0.4	0.1	0.1	12
10 largest host developing economies	9a/	17b/	24c/	18a/	11b/	16c/	28c/

Source: United Nations, World Investment Report 1992,and 1993 (forthcoming).

a/ Argentina, Brazil, China, Colombia, Egypt, Hong Kong, Malaysia, Mexico, Nigeria, Singapore.

b/ Argentina, Brazil, China, Egypt, Hong Kong, Nigeria, Singapore, Taiwan, Province of China, and Thailand.

c/ Argentina, Brazil, China, Indonesia, Rep. of Korea, Malaysia, Mexico, Taiwan, Province of China, Thailand and Venezuela.

5. As a result of the debt crisis, Latin America's share of worldwide FDI fell from 12 per cent in 1980-1985 to 6 per cent in 1986-1990, though a small number of countries, notably Argentina, Chile and Mexico, managed to increase their volume of FDI inflows since the late 1980s. 5/ More recently, stronger growth in several Latin American countries, major improvements in macroeconomic performance, the relaxation of foreign investment policies and privatization initiatives helped to improve the region's attractiveness to foreign investors. New inflows underwent a considerable expansion in 1991 (by 36 per cent to US$ 13 billion), which appears to have been sustained in 1992. Debt-equity swaps and privatization of State enterprises were responsible for much of the new inflows; consequently a large part of these inflows have gone into the acquisition of existing assets rather than to greenfield investment. In spite of these improvements, FDI inflows in Latin America were still concentrated in a small number of countries (Argentina, Brazil, Chile, Mexico and, recently, Venezuela).

6. During the 1980s, Africa's tiny share of global FDI flows declined even further, from 3 per cent in 1980-1985 to 2 per cent in 1986-1990, with the region's least developed countries experiencing extreme marginalization. However, in 1991 inflows reached US$ 3 billion, an increase of 45 per cent over 1990. Three quarters of these flows were attracted by oil-exporting countries. The attractiveness of many non-oil-producing African countries to foreign investors continues to be overshadowed by slow economic growth and unstable domestic conditions, negating the positive steps taken to liberalize the regulatory framework of FDI. Nevertheless, Africa's rich natural resources should provide the basis for a renewal of investment in the near future.

7. On the upside, East, South and South-East Asian countries are now among the leading recipients of FDI flows. Their share of global inflows averaged 9 per cent throughout the 1980s; in 1991, it reached 13 per cent, which was the highest share among regional groups of developing country recipients (table 2). Asia continued to account for more than half of all FDI flows to developing countries. The bulk of these flows went to a few countries: China, Indonesia, Malaysia and Thailand. China has now emerged as the largest single recipient of FDI flows in the region (and indeed among all developing countries). The attractiveness of these countries is based on their high economic growth rates, favourable domestic conditions and relatively low labour costs. The size of the Chinese, Indian and Indonesian domestic markets is an additional asset. Recent moves in India towards liberalization of its FDI regime coupled with lower production costs have resulted in a significant increase in investment flows in 1991 and 1992.

8. As the Asian FDI market expands, there is a tendency for countries to seek to improve the quality of their inflows by strengthening domestic linkages and encouraging investment in technologically-advanced industries. The availability of skilled labour and low production costs have encouraged foreign investors to use the region as a production base from which to supply markets worldwide. At the same time, lower-skilled labour-intensive industries have tended to move from the technologically more advanced and higher cost locations, (such as Taiwan, Province of China, Singapore and the Republic of Korea) to low-cost Asian countries. This has given rise to an

increasingly dynamic intraregional network of investment and trade especially between Hong Kong, Malaysia, Singapore, Taiwan, Province of China and Thailand.

9. In Central and Eastern Europe, the expansion in FDI inflows, which started in 1990, continued in 1991 and during the first half of 1992, though the volume remained small (US$ 2.4 billion in 1991). Privatizations and other market-oriented reforms have helped to encourage FDI in that region. Nevertheless, the prospects for a sustained expansion of FDI remain uncertain due to the unsettled economic and political environment.

10. While the regional dominance of FDI flows to developing countries continues to be strongly in favour of Asia, the concentration of these flows among individual country recipients has recently weakened. Though the 10 largest developing country recipients of FDI remain well entrenched, they now account for a smaller proportion of total inflows to developing countries than in the early 1980s (66 per cent in 1991 compared to an average of 71 per cent for the period 1980-1985). The number of developing countries attracting significant inflows of FDI has increased substantially. It appears that a second group of developing countries is rapidly emerging as a major pole of attraction for FDI. 6/

C. Origin and sectoral destination

11. Recent FDI patterns have displayed notable changes in the sources of these flows and their sectoral concentration. Virtually all FDI flows (97 per cent) originate in OECD countries. France, Germany, Japan, the United Kingdom and the United States accounted for about 70 per cent of global FDI outflows during the 1980s. However, flows of FDI from Japan have undergone a remarkable expansion (from 10 per cent of world outflows in 1980-1985 to 20 per cent in 1986-1990), making Japan the world's largest source of FDI. The growth of FDI from France has also been quite impressive (from 6 per cent to 10 per cent of worldwide flows during the same period). The recent gains made by French and Japanese FDI have replaced declining flows from the United States and the United Kingdom (whose shares have fallen from 26 per cent to 14 per cent and from 20 per cent to 17 per cent respectively) (table 2).

12. The main suppliers of FDI to Latin America remain the United States (56 per cent in 1988-1989) and Europe (23 per cent). In Asia, Japan has emerged as the predominant partner, strengthening its position from about 28 per cent in the period 1980-1984 to about 57 per cent in 1988-1989 (the United States and European investors provided about 26 per cent and 17 per cent respectively in 1988-1989). FDI from the United States to Africa has virtually disappeared, accounting for only 3 per cent of that region's inflows, whereas Europe and Japan supplied 71 per cent and 44 per cent respectively of FDI flows to Africa during 1988-1989. The dominant role of FDI from the United States in Latin America and the Caribbean, from Japan in Asia, and from Europe in Africa, underlines the tendency towards greater regionalization of FDI around the three main home centres. This pattern was most pronounced towards the end of the 1980s and partly reflected the strategies followed by transnational corporations (TNCs) from the "Triad" in building up regionally integrated networks of affiliates.

13. The distribution of worldwide FDI flows by economic sectors shows the preponderance of the services sector, most noticeably in the cases of flows from Japan and France. But there were also substantial new inflows of FDI into the secondary sector (mainly manufacturing). Sectoral distribution appears to have differed among regions and countries according to their level of development. In most countries in Asia, FDI went primarily to the secondary sector, although investment in the tertiary sector was of major importance for many Asian countries. Some resource-rich countries like Indonesia, Papua New Guinea and Viet Nam also attracted FDI into the primary sector (mainly oil production). In Latin America, the rate of new investment flows into the natural resources and services sectors has now surpassed that in the manufacturing sector. In Africa, the bulk of FDI went to the primary sector.

II. Foreign investors' motivations

A. Factors leading to the internationalization of production

14. The reasons that push enterprises to extend the horizon of their activities beyond the boundaries of their home base or to expand their international operations can be grouped in six broad types: 7/

(1) Market-expansion motive. This is linked to the horizontal integration strategy of firms. Production will move to fast-growing markets, to protected markets (as a means to overcome trade barriers), and to countries with preferential access to other large markets.

(2) Cost-reduction motive. This often leads to investment in locations where labour costs are low. This motive is particularly relevant in the low-technology segments and assembly plants, which do not require highly skilled labour and for which labour represents an important element of production costs. Foreign production locations then become platforms for exporting finished or intermediate products to other markets.

(3) Resource-seeking motive. Firms invest to secure sources of primary commodities and integrate them vertically in their production process. Primary resources can also be exploited for exports to other countries.

(4) Technology-seeking motive. It induces a firm to invest abroad, with a view to gaining access to foreign technology. This motive seems to be very often at the basis of the decision by firms from developing countries to invest in developed countries. Technology-seeking enterprises may acquire foreign companies to secure access to some technology that foreign firms control. Alternatively, they may establish research or production facilities in a foreign country to take advantage of available trained personnel or to acquire experience in product development and marketing.

(5) Risk-avoidance motive. Concerns about risk avoidance lead to the decision to diversify centres of production geographically, in order to minimize exchange rate risks, to achieve more stable overall demand by operating in diversified markets, or to dilute the political risk linked to investment in one country.

(6) Defensive competitive strategy. This is an important factor which explains the growth of cross-investments between industrialized countries. This motive seems to have gained importance since 1980.

15. With these motives in mind, firms need to have other specific characteristics that offer an advantage or support for the internationalization of production. These characteristics are the following:

- the size of the firm, which allows economies of scale or economies of scope: 8/ a positive correlation exists between the firm's size and its internationalization. However, this characteristic is not the most important, as small and medium-sized enterprises (SMEs) have also "gone international". Very often, these SMEs follow the big international firms abroad as their suppliers. The main sectors where the presence of multinational SMEs is important are: mechanical engineering, metallurgy, chemicals and electrical machinery. Internationalization of SMEs often takes the form of joint ventures, or joint production without equity participation. Nevertheless, despite the participation of thousands of SMEs in the internationalization of production, the largest companies still account for a significant share of TNCs' foreign assets; 9/

- the importance and high potential of research and development (R & D) activities: firms engaging in intensive R & D activities acquire a technological advantage over their competitors; the more sophisticated this technological advantage is, the more firms will be willing to exploit it by producing themselves rather than licensing;

- a production line that allows for product differentiation to respond to specificities of different consumer markets;

- easy access to finance, which allows for a large financing of investment abroad. It is sometimes argued that firms tend to invest abroad when accumulated profits are high (the case of United States firms in the 1960s and Japanese firms in the 1980s). In some instances, producing firms belong to a holding dominated by a bank or a banking consortium, which provides the financial backing for foreign operations. The recent globalization of financial markets has provided TNCs with broader means to finance their operations worldwide;

- export experience: almost without exception, before undertaking foreign direct investment TNCs have had long experience in exporting to foreign markets, thus accumulating a good knowledge of the global market.

16. Finally, the distribution of FDI worldwide results from the interaction between TNCs' motivations and the advantages of foreign locations 10/ (reflected in such factors as level of development, growth prospects, and quality of infrastructure and human capital).

B. Traditional determinants of FDI in developing countries

17. Traditionally, FDI in developing countries has been of two types: local-market-based or export-based. In the first type, FDI is geared towards local or regional markets because of protective trade barriers, or to exploit markets with high growth potential, or else to provide support facilities, such as trading houses, in the markets that are served through exports from home bases. FDI of the second type exploits a comparative advantage of host countries in order to develop a platform for exporting to the international market. This comparative advantage may be derived from a rich resource base, a cheap labour force or preferential access to other markets. The importance of each of these factors has varied over time and with the sectoral activity concerned.

18. In the 1960s and 1970s, much of FDI in Latin America went into import-substituting ventures, to overcome the high protective barriers of countries in this region and also to establish production units to supply the regional markets created by regional integration agreements. In the 1970s, FDI in Asia was attracted by low labour costs. Singapore and Hong Kong, with their policies of openness to FDI and availability of a numerous and cheap labour force, were the first locations for production units of TNCs in their vertical integration strategy, thus serving as export platforms to other countries (including home countries). In Africa and the Middle East, FDI was mainly concentrated in the exploitation of primary resources.

19. In the 1970s and early 1980s, foreign investors relocated in developing countries the production of primarily labour-intensive goods requiring only simple production technologies, very often using these locations as assembly lines for intermediate products which were then re-exported to the home countries.

20. In the manufacturing sector, FDI in developing countries is concentrated in fewer industries than in developed countries. This low dispersion of industrial investment results from the less advanced level of development, but also from restrictive policies in the past which barred entry to some reserved sectors. There is no typical pattern of industrial distribution as differences exist among countries according to their resource endowment, level of development and policy priorities. However, the evidence available from country case studies suggests that chemicals, electronics, textiles and food processing are among the branches that have received the largest amounts of FDI. 11/

21. FDI based on the exploitation of cheap unskilled labour in developing countries was made possible by the mass production of standardized goods, which allowed for vertical integration involving a clear division of labour, between highly skilled and low-skilled tasks, and the separation of conception from execution. However, cheap unskilled labour represents a fleeting source of comparative advantage for host countries. As income levels rise, labour costs will also increase, and other host countries will become comparatively more attractive in terms of labour costs. FDI will therefore shift from the "first generation" host countries, where income levels have increased, to "second generation" host countries. The "first generation" countries will consequently have to implement policies to upgrade their technological

capacity in order to attract more FDI with a higher technological content and/or to invest themselves in other developing countries where labour is still cheap.

22. In recent years, technological progress and innovations in industrial organization have considerably diminished the importance of cheap labour in industrial production. The outcome of these developments is a new reallocation of FDI. It is becoming clear that FDI based on large-scale requirements for comparatively unskilled manpower for repetitive tasks will recede in favour of FDI requiring high-tech infrastructure and skilled labour. For example, the United States has been relocating increasingly high-tech production (such as electrical and electronic machinery) to the NICs and the ASEAN countries, despite the fact that wage rates in NICs have increased and are relatively higher than in other developing countries. 12/ Another example is India, where many computer companies have relocated their software units to take advantage of the availability of highly skilled and relatively low-cost scientists and engineers. 13/

23. FDI based on high technology and skilled labour will benefit only a small number of advanced developing countries in the medium term. Many industrial branches, especially those producing standardized manufactured goods (such as simple consumer electronics, garments for export markets or processed foods) still require labour-intensive and low-technology inputs. FDI in these sectors, although globally less important, will remain significant for a large majority of developing countries.

C. Globalization, technological progress and their impact on FDI

1. Globalization

24. As a result of the rapid reduction in transportation costs, and the revolution in communications and information technology, as well as the liberalization of cross-border movements of capital, goods and services, enterprises have globalized their activities in order to strengthen their competitive position.

25. By the mid-1980s, globalization had become a general tendency, originating in the financial sector and later spreading to the industrial sector. The globalization of financial markets came in the wake of the generalized deregulation of domestic financial markets, the virtual elimination of barriers to the movements of capital between industrialized countries, and the impressive development of a worldwide communications system. This globalization led to the multiplication of offshore financial centres and to the introduction of a wide range of new financial instruments. Through this process, international banks have substantially increased their capacity to mobilize finance and to respond effectively to the financing of global strategies of TNCs by enlarging access to finance in any point of the world and by offering a choice of financial instruments adapted to the needs of global firms.

26. In the industrial sector, especially in the high technology segments, global competition has also become a normal feature. Trade liberalization and industrial deregulation have opened previously protected economic sectors to

international competition. Rapid technological progress forces firms to enlarge markets to amortize R & D costs. Changes in consumer markets require product differentiation and physical presence on these markets to respond quickly to shifts in demand.

27. Global strategies of firms focusing on market considerations can be defensive, to retain market shares, or offensive, to increase market shares. 14/ TNCs employ an integrated worldwide approach by locating activities in many countries and coordinating them actively by a combination of trade and FDI strategies (including strategic alliances).

2. Technological progress and new industrial organization

28. The phenomenal advance of technological innovations, in particular in the areas of electronics and robotics, has had a significant impact on relative factor costs, skill requirements and logistical arrangements in the manufacturing activities of industrialized countries. These developments are most noticeable in the sectors of semiconductors, electronic and automotive components, and consumer electronics. Furthermore, these technological innovations have brought about important changes in the production process:

- Labour productivity has improved in industrial countries to the point that direct labour is becoming a minor part of total production costs. Technical sophistication in the manufacturing process has made manufacturing more capital intensive and requires more skilled labour in both production jobs and white-collar occupations.

- Product design and manufacturing techniques have become more interlinked. This interaction has been facilitated by new technology, particularly computer-assisted design techniques. In addition, product design today encourages the use of new materials which serve as substitutes for more traditional materials, especially metals. This process requires continuous efforts in R & D in order to adapt production to market demands.

- The new industrial organization, facilitated by computer technology, takes the form of "just-in-time" systems, whereby locational proximity and integration of supplier and customer plants reduce the costs of maintaining stocks of raw materials, work-in-process and even finished inventories.

29. This new pattern of production, variously referred to as "post-fordism", "flexible specialization", or "the new competition" has changed the basis of global competition from price to product innovation and differentiation. To be sure, cost minimization remains the concern of producing firms, but the primary tool to gain competitive advantage is product innovation. This pattern has condemned "fordist" industrial organization based on mass production, standardization and large-scale plants. 15/ The new product flexibility requires a descaling of plants and shortening of production runs, which, however, do not lead to the downscaling of the size of the global enterprise. On the contrary, large TNCs have benefitted from economies of scope through an integrated coordination of their different affiliates,

Box 1

Networking and strategic alliances

There are three primary motives fuelling the expansion of networking and the building of strategic alliances among global firms. The first is the survival motive. This recognizes that strategic alliances are inherently against the nature of firms to compete with one another. However, in order to survive, firms must interact to obtain the resources they need. Interactions are coordinated not through the market but by the establishment of a series of relationships among the members of the network.

The second and third motives are interrelated and are technology and efficiency driven. Increasing product complexity (the technology motive) creates a situation in which no single firm masters the entire production cycle. Rather, globalization pushes companies to concentrate on their main lines of activity, to shed unrelated production lines, and to acquire components and services from more efficient partners (the efficiency motive).

A firm's decision to "make or buy" will be influenced by the nature of the network in which it participates. This varies from the formal contractual arrangement (the Western style), to the relationship based on trust, honour and the safeguarding of reputation (the Japanese style), in which members believe that they can best advance their own interests by furthering the interest of the group.

Whatever the basis, networking and strategic alliances by both Japanese and Western TNCs have ballooned in recent years, especially within the electronics, information technology and aerospace industries where product complexity and the sharing of capital risk and R & D costs are very important.

Questions have arisen about the solidity of the organizational structures to which the rapid increase in cross-border alliances has given rise. Two alternatives have emerged: the "virtual firm", i.e. a temporary network of companies formed to exploit a specific market opportunity which lies beyond the technological reach of any one of them; and the "relationship-enterprise", i.e. a network of longer-term strategic alliances among big companies, spanning different industries and countries, and acting as if they were a common entity. 16/ The "relationship-enterprise", it is argued, is driven not only by technological change but also by the political necessity of having multiple home bases.

Networking and strategic alliances do not mean the end of competition. A more likely outcome is the intermediate situation in which firms perform a dual role: cooperation at the group level, and competition in the supply of finished products and end-use services and the demand for factor inputs.

and from spreading expenditures on R & D over a greatly expanded sales base. The new flexibility also makes room for innovative networking relationships among SMEs.

30. The globalization process of TNCs has introduced new global structures which differ from the simple organizational structures based on the horizontal or vertical diversification process. The new global firm disperses and coordinates its activities through a complex organizational structure, relying at the same time on a network of non-equity arrangements with its suppliers and subcontractors and strategic alliances with its competitors. Following its global strategy, a firm can choose any nation in which to assemble products, fabricate components or even conduct research, wherever advantages are to be found. Markets are often coordinated on a regional basis.

3. Impact on FDI patterns and policies

31. Globalization and technological progress have far-reaching implications on the rate of growth and locational patterns of FDI. First, FDI is expected to expand further. To sustain competitive advantage, firms have to adopt global strategies, which involve an integrated approach that takes into account all relevant trade and foreign direct investment considerations. At the same time, the new product flexibility often requires the relocation of production units in the consumer markets in order to enhance the ability to tailor products to national demand specificities. These two factors are likely to lead to an intensification of FDI, involving large TNCs as well as SMEs.

32. Secondly, technological innovations give rise to manufacturing techniques that tend to be both capital and skill intensive, and to reduce the labour content of production. Furthermore, close ties need to be maintained between equipment makers, producers and customers. These considerations reduce the possibilities for locating production facilities in developing countries to serve customers in developed countries. As developed countries, on the one hand, offer large sophisticated consumer markets and, on the other hand, are well endowed with skilled human resources, it is possible that many production units of TNCs will be relocated back in those countries. 17/

33. However, as pointed out earlier, some industries, especially those producing standardized consumer goods and those with a lower technology content, still rely on price competitiveness and, hence, minimization of labour costs. These industries will continue to take advantage of cheap labour costs in developing countries.

34. At the same time, some developing markets, either national or regional, offer good prospects because of their large size or growth potential. FDI in medium-technology sectors would tend to flow into these countries; in so doing, TNCs would also transfer new industrial organization patterns to developing country markets, as they would insist that their suppliers (often SMEs) also establish local factories to serve them in production destined ultimately for the local or regional markets. Furthermore, the descaling at the plant level in many sectors opens up new possibilities for locating production in smaller developing countries.

35. In addition, some developing countries have upgraded their technological capacity and the technological skills of their labour force. TNCs will be interested in locating some of their high-technology activities in these countries, as export bases.

36. Overall, therefore, technological and organizational innovations in high-technology industrial sectors will drive FDI in these sectors into countries at an intermediate level of development with a well trained and skilled workforce, in poorer countries with fairly high educational standards, or countries that represent either actually or potentially large and growing markets with pools of skilled workers. This points to the overriding importance for developing countries to invest in the development of their human resources, infrastructure and producer services. It also highlights the danger of marginalization of low-income countries with a low level of skilled labour.

37. The new globalization process also has an important impact on national policies and arouses concerns in the area of competition. A few large TNCs may hold a large part of the decision-making power over the international distribution of industrial production as well as over the development of and access to new technology. The intensified process of globalization leading to ever larger corporate conglomerates raises the risk of industrial cartelization. The oligopolistic character of the world economy might serve to limit competition among firms but would heighten the rivalry among developing countries to attract FDI. This could weaken the capacity of many developing countries to negotiate successfully with TNCs. Moreover, the growth of multi-firm, global strategic alliances increases the possibility of a decline in the bargaining power of individual countries vis-à-vis firms whose boundaries extend beyond national borders. It also raises the question of how to maintain competition between firms increasingly linked through networks and alliances.

III. Competitive advantage of host countries

A. Dynamic development pattern and FDI

38. Once the decision to invest abroad is taken, the choice of where to locate production facilities will depend on the level of development, resource endowment (including labour force) and government policies of host countries.

39. The level of development is an important determinant for FDI location. Host countries attract different types of FDI with differing technological contents that are compatible with their level of development. Countries can be classified according to four stages of development: (1) factor-driven, (2) investment-driven, (3) innovation-driven, and (4) wealth-driven. 18/

(1) The factor-driven stage is characterized by production using basic factors, either natural resources or an abundant and inexpensive semi-skilled labour pool. The range of industries is limited and is concentrated in the price-competitive segments, requiring either little product or process technology or inexpensive technology that is widely available. Technology is sourced largely from other nations. Most developing countries are at this

stage, although there are differences between countries relying on natural resources and countries with embryonic industrialization based on cheap unskilled labour.

(2) The investment-driven stage involves the use of more sophisticated technology in industries. Firms invest in modern, efficient and often large-scale facilities equipped with the best technology available. Production in the relatively standardized, price-sensitive industries is still important. However, the range of industries is broader and uses increasingly skilled workers who are still paid relatively low wages. Foreign technology and methods are not just applied but improved upon. At this stage, countries have additional competitive advantage in the manufacturing of intermediate and capital goods (heavy and chemical industries) and infrastructure (housing, transportation, communications and public works). The newly industrialized countries (NICs) have reached this stage.

(3) The innovation-driven stage brings a widening of industries and segments in which a country can successfully compete. This stage is characterized by an abundance of skilled human capital and an intensification of activities in R & D. The price-sensitive, less sophisticated segments are gradually ceded to firms from other nations, while countries at this stage enjoy a growing international position in more differentiated industry segments and sophisticated services. Firms continue to compete on costs, not so much on factor costs as on productivity due to high skill levels and advanced technology. The advanced, industrialized countries have reached this stage.

(4) The wealth-driven stage ultimately leads to decline, because reliance on accumulated wealth makes national industries less competitive, and chronic underinvestment in industry results in a slowing of innovation.

40. The industrialization process of countries has tended to follow this dynamic pattern, although countries do not necessarily reach the final decline if efforts are made to sustain investment in industries. In the course of their structural transformation, countries will attract the type of FDI which is compatible with their stage of development. 19/ For example, the beginning of the factor-driven stage attracts resource-seeking - or labour-intensive-FDI. At the investment-driven stage, countries attract investment in capital and intermediate goods industries; at the same time, these countries begin to invest abroad, in other lower-wage countries, in labour-intensive manufacturing and resource extraction (particularly if the economy happens to be scarce in natural resources). At the innovation-driven stage, countries attract investment in technology-intensive industries, but also make outward investment in these industries and in other less sophisticated segments.

41. At successive stages of development, FDI can help to accelerate structural change by raising national income and savings, by upgrading technology and by providing externalities through access to services, management and networking capacities. However, the role of domestic policies in upgrading productivity and technology is essential. With appropriate government policies to ensure an "enabling" investment climate, to upgrade

human resource development, to provide adequate physical infrastructure, and to encourage investment in technology, the industrialization process will move into higher value-added, more capital-intensive sectors.

42. With hindsight, it is clear that the process of development and technological transformation of Japan and the NICs has followed this dynamic pattern. With the exception of the NICs, developing countries find themselves at the first stage of development. The difficulties encountered by them in their attempts to move quickly to the second stage of development have resulted not only from domestic policy weaknesses but also from unfavourable external factors.

43. Present conditions of depressed world commodity prices and saturation in most markets for unsophisticated consumer manufactures, together with the unstable domestic economic environment, explain the fact that low-income countries, especially the resource-rich countries of Africa, are not attracting large FDI flows.

B. FDI from developing countries

44. This dynamic pattern of development also explains the transformation of NICs from being exclusively recipients of FDI to becoming sources of investment in other developing countries. As rising levels of income raise wages and appreciate domestic currency, countries that have upgraded the technology content of their industries will locate the labour-intensive and less sophisticated segments of their industries in other countries at a lower stage of development. However, the relocation of low-technology industries in low-wage countries is not the only reason. Firms from dynamic developing countries may have the same global competition approach as the big TNCs. Motives for investing abroad can include market considerations as well as technology-seeking motives.

45. The most dynamic foreign investors from developing countries are the South-East Asian NICs (Republic of Korea, Singapore, Taiwan, Province of China), India and Brazil. Surveys of FDI from developing countries highlight some general features: 20/

(a) First, the geographical distribution favours neighbouring and/or ethnically related countries. Some TNCs from developing countries invest in developed countries either to gain access to export markets or to acquire particular skills and/or technologies.

(b) Second, FDI tends to concentrate in industries using mature or standardized technology and management skills or industries based on natural resources (mostly processing, textiles or mineral exploitation). These investments are sometimes preceded by, or associated with, those promoting exports from investing countries.

(c) Third, most TNCs from developing countries are confined to a limited number of foreign countries. Many prefer to be involved in joint ventures, both to limit their capital commitments and to obtain know-how, managerial and organizational skills or access to the markets of their foreign partners.

IV. The role of host country policies

46. The risks and profitability of an investment in a foreign country depend to a large extent on the policies adopted by the host country. An appropriate policy framework is needed to promote a favourable climate for investment. Such a climate is characterized by political stability, as well as a stable, transparent and predictable economic and legal environment, which allows foreign investors to earn and repatriate reasonable returns on their investment and to integrate their local subsidiaries in their global strategy.

A. Economic conditions

47. One of the most important economic factors in attracting FDI is the strength and growth of the host economies. 21/ Countries with poor growth prospects, even if they adopt a very liberal FDI regime, would not be considered as attractive investment locations. This also explains the slump in FDI in highly indebted countries in the 1980s, as the debt crisis and accompanying stagnation deterred FDI inflows.

48. The lessons of the 1980s have also highlighted the importance of macroeconomic stability in enhancing growth and promoting an "enabling" environment for investment. For domestic and foreign investors, the effects of host country economic conditions on the firms' costs are a central concern. Thus, inflation, the exchange rate, and interest rates are factors that have a direct impact on these costs. A stable macroeconomic policy framework would reduce the costs resulting from uncertainty about the fluctuations or adverse impact of the above-mentioned factors.

49. The general trend towards the application of market-based economic policies, (including privatization and trade liberalization), which are currently pursued by most developing countries and countries of Central and Eastern Europe, is having an impact on FDI flows. In 1990, more then 70 countries had active privatization programmes and the annual number of privatizations worldwide more than quintupled between 1985 and 1990 to around 130. 22/ By the end of the 1980s, the value of state enterprises sold was reported to have reached over $185 billion, with no sign of a slow-down. The participation of foreign companies in the privatization programme has been significant, particularly in Latin America and Central and Eastern Europe. Very often, privatization operations are integrated in debt-equity swaps programmes so as to avoid the potential inflationary impact of such swaps. However, privatization by itself will not be successful in encouraging significant new FDI inflows unless it is accompanied by an overall framework of appropriate policies to ensure a favourable climate for investment.

50. The trend towards the generalized adoption of more liberal, outward-oriented trade policies resulted mainly from the perception that inward-looking industrialization policies brought more costs than benefits. In particular, the experiences of import-substituting foreign investment, generally protected by high barriers from world competition, turned out to be quite inefficient in many cases, especially in the context of sagging domestic markets. Some exceptions exist, however, especially in the industrially advanced countries (Brazil and Mexico, for example), of import-substituting foreign ventures becoming major exporters when given adequate incentives,

access to competitive inputs, an appropriate support structure and the opportunity to reap economies of scale (e.g. the automobile industry). 23/

51. The general shift from protected, inward-oriented policies to more liberalized trade, whether induced by structural adjustment programmes or, more gradually, by governments on their own initiative, puts domestic industries increasingly in competition with imports. Consequently, the competition for attracting FDI could become fiercer, as countries would look to FDI as a means of strengthening the competitive stance of domestic industries. Over the medium term, as the incentive provided by high trade barriers becomes less relevant, FDI flows could be even more concentrated in countries endowed with large growing markets and better placed to take advantage of new technologies.

B. Infrastructure and human resources development

52. Foreign ventures cannot operate in isolation from the local business and industrial environment of host countries. Foreign and domestic investors need adequate private and public support facilities, including capital markets and credit facilities, and efficient physical, technological and human capital structures. It has been noted that the availability of such facilities is determinant. Economic or regulatory policy reforms cannot in themselves offset the obstacles to FDI that are inherent in the structural weakness of recipient countries. A few areas are of particular importance when dealing with FDI:

- As mentioned above, the availability of skilled labour is an important factor in FDI location. Active policies to upgrade human capital through the provision of a high, quality educational and training system are priorities on host governments' policy agendas. Furthermore, as illustrated by the experience of South-East Asian NICs, success in absorbing and efficiently deploying industrial technologies transferred by foreign firms greatly depends on efforts to develop local capabilities, particularly through skill upgrading and local R&D activities (which often require government intervention to overcome "market failures" in investment and education).

- Another determinant is the availability of high quality communications and transport systems as well as an energy supply and other utilities.

- The existence of a thriving locally-owned business sector creates a supportive environment for FDI through efficient networks of local suppliers, consultants, service firms, and possibly partners or competitors. Therefore, it would also be essential to concentrate efforts on the development of local entrepreneurship.

- Business activities should be able to rely on an efficient financial system that caters for the diversified needs of investors in terms of different term structure and risk-bearing loans.

- The provision of appropriate support facilities is a formidable task, involving large and costly investments in infrastructure, education, research and institution building. It is a slow, incremental process which requires good administrative capacity on the part of the government.

- In many countries, because of the high costs involved in building infrastructure and institutions, governments have concentrated their efforts on establishing export processing zones endowed with good support facilities as well as with tax concessions. 24/

- For poorer countries which lack the capacity to undertake comprehensive efforts to build local facilities, there is an urgent need for more active support by the donor community in such areas as strengthening the private sector and local entrepreneurship, building institutional capacity, developing and improving physical infrastructure, and enhancing human resource development.

C. FDI-related policies and regulatory framework

1. Liberalization of FDI policies

53. The 1980s witnessed important changes in government policies on FDI. The unfolding of the debt crisis, the widening of the technological gap, as well as the shift towards export-oriented industrialization strategies, have changed developing countries' attitudes towards FDI. It is now generally recognized that FDI could play a valuable role in promoting growth and development.

54. Reflecting these changes, the worldwide trend towards liberalization of government policies on FDI, which started in the 1980s, accelerated in the early 1990s, especially with the recent implementation by Central and Eastern European countries of liberalized FDI regimes. 25/ In addition, several regional groupings such as the European Community (EC), Caribbean Community (CARICOM), Eastern and Southern Preferential Trade Area (PTA), Southern Cone Common Market (MERCOSUR), and the forthcoming North American Free Trade Agreement (NAFTA) contain investment regulations at the regional level, aiming at a more liberal stance on FDI. However, a few Western countries traditionally associated with liberal attitudes towards foreign investors introduced some controls on business operations affecting foreign investment, although, overall, the framework for FDI in all developed countries is now liberalized to a very large extent. The OECD member States have adopted the "Codes of Liberalization of Capital Movements and Current Invisible Transactions".

55. The new liberalizing measures adopted by developing countries have typically included the lifting of local ownership requirements and sectoral restrictions (for example, in services such as banking, tourism and telecommunications), the simplification of approval procedures, liberalized conditions of entry and establishment, and the introduction of more liberal rules for the transfer of funds and capital repatriation.

56. This trend does not mean, however, that the pace of change has been the same for all countries. Differences arise mainly from countries' strategies on, and success with, technology development. Countries that had made major progress in building up domestic capabilities, while becoming more attractive as an investment location, could afford to adopt liberalized FDI regimes. Some other countries, while welcoming FDI, restricted foreign entry in sectors reserved for indigenous technology development.

2. Bilateral treaties and World Bank guidelines

57. Over the past few years, the network of bilateral treaties for the promotion and protection of FDI continued to expand and reached a total of 440 by mid-1991. 26/ In an effort to promote a favourable climate for foreign investors, host countries concluded bilateral treaties which typically covered the following areas:

- treatment of foreign investment (generally including fair and equitable treatment, and most-favoured-nation treatment, but not right of establishment);

- expropriation (in the public interest, or for public purpose);

- compensation (prompt, adequate and effective, and determined by accepted criteria);

- transfer of payments (effective transfer of profits, wages and salaries, capital repatriation and compensation);

- subrogation and settlement of disputes.

58. In 1992, at the request of the Development Committee, the World Bank compiled a set of guidelines on the legal framework for the treatment of foreign investment, drawing on the general trends and provisions established by bilateral investment treaties, national investment codes and multilateral instruments. 27/ In the view of the World Bank, these guidelines represent a "desirable overall framework which embodies essential principles meant to promote foreign direct investment in the common interest of all members". The guidelines contain principles related to: (a) admission, (b) treatment (including the transfer of investment capital and returns), (c) expropriation and unilateral alterations or termination of contracts, and (d) settlement of disputes. As these guidelines provide a good indication of the state of the art in respect of the evolution of principles and standards related to the treatment of FDI, they represent a useful global instrument, giving a measure of principles and concepts that are acceptable to all States in relation to FDI from any other State.

3. Incentives and disincentives

59. In addition to national codes and bilateral treaties on foreign investment, many host countries applied special measures to provide incentives or to impose particular requirements vis-à-vis foreign investors. Incentives may include:

- fiscal measures (such as preferential tax rates, tax holidays, tax exemptions, tax credits, accelerated depreciation, other measures relating to social security contributions and investment reserves);

- financial measures (such as grants, preferential loans and loan guarantees);

- tariff concessions (tariff and non-tariff barriers on final goods produced by foreign investors, and tariff exemption on inputs);

- debt-equity swaps (benefits of debt discount accruing to foreign investors);

- export processing zones;

- other non-financial measures (such as infrastructure-related assistance, preferential government contracts, and provision of certain services).

60. The disincentives or performance requirements, which are generally referred to as trade-related investment measures (TRIMs) may include requirements on exports, local content, trade balancing, domestic sales, import substitution, local equity, and transfer of technology.

61. Disincentives are very often linked to the award of incentives. For example, the availability or level of a particular award may be conditional upon, or proportional to, the fulfilment of performance requirements. In this way, performance requirements are viewed as a means to reduce the costs of incentives for host countries.

62. The main objective of incentives is to influence foreign investors' decisions on the location of their investment, with a view to developing targeted industrial sectors, correcting regional imbalances within a country and reducing unemployment. Performance requirements are used for different purposes: to protect the domestic sector; to stimulate domestic activity through backward and forward linkages; to improve the integration of foreign-controlled enterprises into the host country economy; to secure host country benefits from FDI; and to counteract what some host countries perceive as practices of multinational enterprises that would reduce the scale of such benefits.

63. The theoretical justification for the use of incentives and disincentives can be based on the argument that under conditions of imperfect or oligopolistic competition among TNCs, it is legitimate for countries to play a more active role in shaping the composition of their economic base, notably by influencing the location of production, the selection of inputs, the size of operations and the marketing of output. 28/

64. Both developed and developing host countries are using incentives and disincentives to attract FDI and to internalize the benefits resulting from such investment. Survey studies indicate that developed countries frequently use market access, tariff escalation and investment incentives (often in the form of general corporate tax reduction, cash grants or industry-wide schemes

to support high-technology sectors) to attract investors, while developing countries rely more on fiscal incentives, debt-equity swaps, and export processing zones. 29/ It is also found that TRIMs occur more frequently in developing countries.

65. The use of incentives has intensified in recent years, as countries compete to attract FDI to such an extent that many observers have qualified this situation as an "investment war". Indeed, a survey on government policies on FDI in 46 countries (of which 20 are developed countries) 30/ found that, over the period 1977-1987, the most frequent changes were related to subsidies and fiscal incentives. There were as many as 58 recorded policy changes, 21 of them in developed countries, which aimed at increasing the after-tax and subsidy profitability of foreign investment. In contrast, the lowest frequency of change was recorded in the performance requirements, as only seven policy changes, including one in a developed country, were adopted in this regard.

66. The crucial question is whether the provision of incentives can influence the location of foreign investment. Survey studies on the role of incentives 31/ suggest that the effectiveness of incentives in inducing foreign investors to invest in host countries has been modest or even marginal. In surveys assessing the importance that decision makers attach to various factors affecting the investment location, other considerations - low labour costs, adequate infrastructure, and proximity to markets - frequently rank well above incentives. The limited effectiveness of incentives may also be explained by the fact that, when countries compete for foreign investment, countries with the same locational attributes often offer more or less the same package of incentives.

67. Some other surveys, 32/ however, point out that, while incentives may not play a key role in influencing the decision of whether or not to undertake an overseas investment, once the decision has been taken to set up production facilities abroad, the choice of FDI location may then take into account the availability of incentives. This appears especially true for "footloose" industries, which can choose among production sites with comparable costs; automotive and food processing industries, in particular, seemed to be somewhat sensitive to incentive measures of host countries.

68. As regards individual incentive measures, there is some evidence that fiscal incentives are important for export-oriented FDI, while tariff protection is important for FDI geared to domestic markets. Debt-equity swaps seem to have played a role in the increase of FDI in some Latin American countries. 33/ Export processing zones, by providing a package of fiscal, financial and tariff concessions, along with good infrastructure and other advantages, have helped to attract FDI in a number of developing countries. 34/

69. Finally, a survey study 35/ attempted to measure the effectiveness of investment-related policies by asking foreign investors to specify their behaviour in the case of a country that had applied actual incentive and disincentive policies but removes its investment policy package, while the investment policy packages of all other countries remain constant. The results of the study indicated that performance requirements had a negligible

impact on the location of investment, but that incentive policies influenced the decision to locate the investment in two-thirds of the cases examined. At the margin, host governments could not reduce their packages to attract foreign firms without losing substantial inward FDI.

70. An overall conclusion that can be drawn from these surveys on incentives is that host countries get trapped in the "prisoner's dilemma", leading to competitive bidding in which all participants are left worse off than if no bidding had taken place. As pointed out by Guisinger: "Incentives may be effective in an asymmetrically perverse way: an increase in incentives may produce no net gain in competitive situations, but unilateral withdrawal may be highly detrimental to a country's inflow of foreign capital". 36/

71. It would, therefore, be beneficial for host countries to arrive at a harmonization of policies in order to reduce unnecessary costs. A first step would be to ensure more transparency on FDI policies. Countries can exchange information about their regulatory regime and other FDI-related policies, as well as the impact of these policies on FDI flows with a view to sharing experiences on the costs and benefits arising from those policies. This would help to improve the host countries' bargaining position vis-à-vis foreign investors. From the perspective of TNCs, increased transparency of investment policies would enable them to make better FDI decisions in an overall improved policy environment for their international activities.

72. The Uruguay Round has tackled the issue of TRIMs 37/ considering them as incompatible with some of the GATT articles. The 1991 draft Final Act contains an illustrative list of TRIMs related to trade in goods which are "inconsistent with Articles III (national treatment) and XI (prohibition of quantitative restrictions) of the GATT". Among the TRIMs included are local content requirements and measures that restrict the volume or value of imports or relate it to the level of exports, including access to foreign exchange. Such measures should be notified and eliminated within two years for developed countries, five years for developing countries, and seven years for least developed countries. Developing countries can temporarily deviate from the provisions contained in the Draft Decision, in cases that are consistent with Article XVIII. 38/ Furthermore, the negotiations agreed to review the list of TRIMs within five years and consider whether it should be complemented by provisions on investment and competition policy.

Notes

1/ By comparison, during the same period the average annual rate of growth for world exports was 10 per cent. See United Nations, World Investment Report 1993 (forthcoming), New York.

2/ At 1990 prices and exchange rates (using GNP deflators for Development Assistance Committee (DAC) member countries).

3/ Reinvested earnings are a more significant component of FDI flows to developing countries than in the developed countries where cross-border flows tend to be more important. Ibid.

4/ Excluding flows to offshore centres.

5/ Partly accounted for by the success of debt-equity swap programmes. During the period 1985-1989, FDI through debt-equity swaps provided 90 per cent of total FDI in Chile; 59 per cent in Brazil; 30 per cent in Mexico, and 20 per cent in Argentina. See, United Nations, World Investment Report 1992 (ST/CTC/130), United Nations publication, Sales No. E.92.II.A.19), p.26.

6/ The countries or territories forming the group of 10 largest developing economies recipients of FDI fluctuate among the following: Argentina, Brazil, China, Egypt, Hong Kong, Indonesia, Malaysia, Mexico, Nigeria, Republic of Korea, Singapore, Taiwan, Province of China, Thailand and Venezuela (table 3). A second group of rapidly emerging host countries includes: Chile, Colombia, India, Morocco, Pakistan, Philippines, Tunisia and Viet Nam.

7/ This classification of FDI motivations is adapted from Robock, S.H. and K. Simmonds, International Business and Multinational Enterprises (Irwin, Boston, 1989).

8/ The unit cost of indirect expenditures, incurred by research and development, design, marketing, organizational and other indirect inputs can be diminished if these expenditures can be spread over a large volume of sales, either through production in large factories (economies of scale) or production in a large number of small factories (economies of scope). The second type of production has become more frequent recently, as technological progress and new organizational structures entail product differentiation and plant descaling.

9/ In 1990, the 100 largest TNCs (excluding those in banking and finance) accounted for about a third of the total stock of FDI. See World Investment Report 1993, op.cit.

10/ Factors relevant to host countries' locational advantages are discussed in sections III and IV.

11/ See UNIDO, "Foreign direct investment flows to developing countries: Recent trends, major determinants and policy implications", PPD.167, 10 July 1990, pp. 15-19.

12/ See Plummer, M. and E. Ramstetter, "Motives and policies affecting U.S. direct investment in ASEAN", Development and South-South Cooperation, vol. V, No. 9, December 1989.

13/ This case of "software technology parks" is cited by Pierre Jacquemot, La Firme Multinationale: une Introduction Economique (Economica, Paris, 1990), pp. 77-78.

14/ A vast literature on global strategies of TNCs treats this topic in detail. See, in particular, M. Porter, The Competitive Advantage of Nations (New York, Free Press, 1990), pp. 55-67 and pp. 606-615; Robock, S.H. and Simmonds, K., op. cit.

15/ For an analysis of the new industrial pattern and its implications, see: Raphael Kaplinsky, "Direct foreign investment in third world manufacturing: Is the future an extension of the past?", IDS Bulletin, vol. 22, No. 2, 1991.

16/ See "The global firm: R.I.P.", The Economist, 6 February 1993.

17/ Examples of relocation of production units in developed countries are cited by Pierre Jacquemot, op. cit., footnote 1, p. 264. According to this source of information, in 1985, Philips decided to relocate the production of television frames from South-East Asia to Europe and the United States, and RCA repatriated assembly lines from Taiwan, Province of China, to the United States. Likewise, in recent years, IBM produced computer parts in integrated production units in the United States, stopping production in Asia. Apple decided to produce its new generation of computers in California, near to its suppliers.

18/ This four-stage development pattern has been developed by M. Porter on the basis of development experiences of developed and developing countries. See M. Porter, op. cit., part III, chap. 10: The competitive development of national economies, pp. 543-576.

19/ Dunning has suggested a similar development cycle to explain the types of FDI that countries attract in line with their stages of development. See John H. Dunning, Explaining International Production (London, Boston, Massachusetts, Hayman, 1988), chap. 5: "The investment development cycle and third world multinationals", pp. 140-168. T. Ozawa has also adopted this development cycle pattern of FDI, based on Porter's analysis of the four stages of development; see Terutomo Ozawa, "Foreign direct investment and economic development", in United Nations, Transnational Corporations, vol. 1, No. 1, New York, February 1992.

20/ See, in particular, J.H. Dunning, op. cit., chap. 5; S. Lall, "Direct investment in South East Asia by the NIEs: Trends and prospects", Banca Nazionale del Lavoro, Quarterly Review, No. 179, December 1991.

21/ Empirical studies on FDI have shown the high correlation between FDI flows and the size and growth of host economies. See, for example, Thomas L. Brewer, "Foreign direct investment in developing countries: Patterns, policies and prospects", World Bank (International Economic Department, Working Paper WPS 712, June 1991); United Nations Centre for Transnational Corporations, "Government policies and foreign direct investment" (ST/CTC/SER.A/17, November 1991).

22/ See World Investment Report 1992, op.cit., p.86.

23/ UNIDO, "Foreign direct investment flows ...", op.cit., p.34.

24/ For an assessment of export processing zones, see UNCTAD, "Export processing zones: Role of foreign direct investment and developmental impact", report by the UNCTAD secretariat (TD/B/WG.1/6), 1993.

25/ For more details on liberalization patterns, see World Investment Report 1992, op.cit., pp. 79-85, and the forthcoming World Investment Report 1993.

26/ See World Investment Report 1992, op.cit., p.77-79.

27/ World Bank, Legal Framework for the Treatment of Foreign Investment, Volume II: Guidelines, 1992.

28/ It is empirically found that imperfect competition is the most accurate characterization of the industries in which FDI takes place; see United Nations: The Impact of Trade-Related Investment Measures on Trade and Development, United Nations publication, Sales No. E.91.II.A.19, New York, 1991.

29/ See OECD: Investment incentives and disincentives: effects on international direct investment (Paris, 1989); United Nations, The Impact of Trade-Related Investment Measures ..., op.cit.; Stephen Guisinger, "Host-country policies to attract and control foreign investment", in Theodore H. Moran and contributors, Investing in Development: New Roles for Private Capital? (Overseas Development Council, Washington D.C., 1986).

30/ UNCTC, "Government policies and foreign direct investment", op.cit.

31/ An account of these survey studies can be found in United Nations, The Determinants of Foreign Direct Investment (United Nations publication, Sales No. E.92.II.A.2, 1992; United Nations, The impact of Trade-Related Investment Measures; S. Guisinger, "Host-country policies to attract and control foreign direct investment", op.cit.; S. Guisinger, "Rhetoric and reality in international business: a note on the effectiveness of incentives", in United Nations, Transnational Corporations, vol.1, No.2, New York, August 1992.

32/ See, for example: D.J.C. Forsyth, US Investment in Scotland (New York, Praeger Publishers, 1972); G.L. Reuber with H. Crookell, M. Emerson and G. Gallais Hamonno, Private Foreign Investment in Development (Oxford, Clarendon Press, 1973).

33/ Empirical studies conducted by IFC and the Institute of International Finance, have concluded that debt-equity swap programmes have induced additional FDI in Latin America. See, J. Bergsman and W. Edisis, Debt-Equity Swaps and Foreign Direct Investment in Latin America, IFC Discussion Paper No. 2, Washington, D.C., 1988; Institute of International Finance: Fostering Foreign Direct Investment in Latin America, Washington, D.C., 1990.

34/ See UNCTAD, "Export Processing Zones ...", op. cit.

35/ Stephen E. Guisinger and associates, Investment Incentives and Performance Requirements (New York, Praeger Publishers, 1985), study sponsored by the IFC of the World Bank.

36/ Stephen Guisinger, "Host-country policies ...", op.cit., p.166.

37/ A decision on TRIMs was included in the draft Final Act of the Uruguay Round. See World Investment Report 1992, op.cit., pp. 70-73.

38/ That is, in cases where the application of TRIMS is necessary owing to balance-of-payments problems and infant industry and development considerations.